Limited Phase II Environmental Site Assessment

Bell Trading Post Property
Albuquerque, Bernalillo County, New Mexico
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Table of Contents

1.0 INTRODUCTION 1
- 1.1 Project Overview 1
- 1.2 Site Description and Land Use 2
- 1.3 Physical Setting 3
- 1.4 Site Contaminants of Potential Concern 4

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS 5
- 2.1 1994 Subsurface Soil Investigation 5
- 2.2 Phase I Environmental Site Assessment 6
- 2.3 Phase II Site Investigation – DE&S/INTERA 6
- 2.4 REIS Limited Asbestos and LBP Survey 7

3.0 2014 LIMITED PHASE II SITE INVESTIGATION ACTIVITIES 7
- 3.1 Pre-Mobilization Activities 8
- 3.2 Characterization Sampling of Soil/Gas and Air 9
  - 3.2.1 Soil Vapor Sampling Outside the Site Building 10
  - 3.2.2 Soil Vapor Sampling Within the Site Building Crawlspace 11
  - 3.2.3 Air Sampling 12
- 3.3 Investigation-Derived Waste Management 12
- 3.4 Field Quality Assurance/Quality Control 12
- 3.5 Deviations 13

4.0 LIMITED PHASE II CHARACTERIZATION SAMPLING RESULTS 14
- 4.1 Technical or Regulatory Guidelines 14
- 4.2 Soil Gas 14
- 4.3 Air 15
- 4.4 Evaluation of Site Soil Gas and Air 16

5.0 CONCLUSIONS AND RECOMMENDATIONS 17

6.0 REFERENCES 19

List of Figures

Figure 1 Site Location Map
Figure 2 Site Map
Figure 3 Soil Gas and Air Sampling Locations
Figure 4 VOC Concentrations in Soil Gas
Figure 5 VOC Concentrations in Air

List of Tables

Table 1 Field Quality Assurance/Quality Control Assessment
Table 2 Laboratory Analytical Results - Soil Gas Vapor
Table 3 Laboratory Analytical Results - Air

List of Appendices

Appendix A Access Agreement
Appendix B Site Photo Log
Appendix C Field Forms and Notes
Appendix D Laboratory Analytical Reports

Acronyms and Abbreviations

ACBM	asbestos-containing building materials
bgs	below ground surface
CGI	combustible gas indicator
City	City of Albuquerque
COC	certificate of completion
COPC	contaminant of potential concern
CRWQCB	California Department of Toxic Substances Control/Regional Water Quality Control Board
DE&S	Duke Engineering & Services
EDB	1,2-dibromoethane
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
ESC	ESC Lab Sciences
ESL	environmental screening level
FD	field duplicate
FHDC	Family Housing Development Corporation
ft	feet or foot
GCMS	gas chromatograph/mass spectrometer
GWQB	Ground Water Quality Bureau
HEAL	Hall Environmental Analysis Laboratory, Inc.
ID	identification number
IDW	investigation-derived waste
INTERA	INTERA Incorporated
Keers	Keers Environmental Services, Inc.
LBP	lead-based paint
µg/m^3	microgram per cubic meter
µg/L	microgram per liter
mg/kg	milligram per kilogram
mL/minute	milliliter per minute
MDL	method detection limit
NMED	New Mexico Environment Department
NM-GS	New Mexico Ground Water Standard as defined by the State of New Mexico Water Quality Control Commission

Acronyms and Abbreviations (concluded)

NMWQCC	New Mexico Water Quality Control Commission
PID	photoionization detector
PPE	personal protective equipment
PRT	Post-Run Tubing
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
REIS	Rhoades Environmental Inspection Services, Inc.
RL	reporting limit
RPD	relative percent difference
RSL	regional screening level
SAP	sampling and analysis plan
Site	Bell Trading Post Property, Albuquerque, New Mexico
SIM	Select Ion Monitoring
SSL	soil screening level
TCE	trichloroethene or trichloroethylene
TCLP	toxicity characteristic leaching procedure
TD	total depth
UST	underground storage tank
VISL	vapor intrusion screening level
VISTA	Vista Geoscience LLC of Golden, Colorado
VOC	volatile organic compound
VRP	Voluntary Remediation Program

1.0 INTRODUCTION

This report presents the results of Limited Phase II Environmental Site Assessment (ESA) activities completed at the Bell Trading Post Property located at 1503 Central Avenue NW in Albuquerque, New Mexico (Site). The following Limited Phase II ESA field activities: (1) active soil vapor sampling and (2) indoor air sampling were performed at the Site by INTERA Incorporated (INTERA) in June 2014 at the request of the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) (INTERA, 2014b). The intent of these additional characterization sampling activities is to further assess potential soil vapor and indoor air impacts associated with former industrial operations at the Site (NMED, 2013). The GWQB conducted a recent review of soil gas data from samples collected as part of a 2001 environmental investigation of the Site that indicated a possible historical release of solvents, specifically trichloroethene (TCE) (DE&S, 2001). All activities were completed using funds garnered from NMED's Community-wide Hazardous Assessment grant.

The Limited Phase II ESA field activities completed at the Site followed the guidance and requirements set forth in the approved site-specific Sampling and Analysis Plan (SAP)/Quality Assurance Project Plan (QAPP) (INTERA, 2014a). The Limited Phase II ESA SAP/QAPP was approved by NMED and the United States Environmental Protection Agency (EPA) on May 8 and May 12, 2014, respectively (INTERA, 2014a).

The remainder of this section (**Section 1**) presents general information regarding project background including, a history of Site operations and land use, physical setting and Site conditions, and a list of potential or known Site contaminants of concern. **Section 2** summarizes the environmental investigation history for the Site. Details regarding the latest Site investigation sampling activities, sample collection methodology, and any deviations from the project-specific SAP/QAPP that occurred during execution of the Limited Phase II ESA are presented in **Section 3**. A discussion of the corresponding analytical results is presented in **Section 4**. **Section 5** provides conclusions and recommendations and references are provided in **Section 6**. All associated figures, tables, and appendices are attached and follow the text.

1.1 Project Overview

Located at 1503 Central Avenue Northwest in Albuquerque, New Mexico, the Site occurs within a mixed use commercial residential area of the City of Albuquerque (City) and is bounded to the southwest by Central Ave SW, northwest by Laguna Blvd NW, north by Roma Ave NW, and east by the termination of 15th St NW to the south (Figure 1 and 2).

A warehouse building of approximately 30,000 square feet (ft^2), the Site was the former location of both a jewelry manufacturing (1947 until circa 1975) and later, a commercial film development facility (1982 until 1984) (INTERA, 2005). In 2001, the City decided to acquire the Site for

redevelopment as future residential housing. Due to its former operations, the Site qualified as a Brownfields property, defined by the EPA as "real property, the expansion, redevelopment, or re-use of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." As a result, the City completed Site acquisition through participation in the NMED Voluntary Remediation Program (VRP), receiving a certificate of completion (COC) for the Site in November 2005. The building has subsequently been renovated by the Family Housing Development Corporation (FHDC) into residential housing units with supplemental street side commercial/retail space.

Recent review of 2001 Site data indicate a possible historical release of chlorinated solvent(s), specifically TCE, may have occurred at the Site (DE&S, 2001). Although NMED provided the City a COC for the Site in 2005, the lack of formal state and federal guidelines and standards as well as general understanding regarding vapor intrusion issues did not allow for the effective assessment and regulation of this contaminant pathway. In recent years, however, soil vapor intrusion concerns, especially related to the redevelopment of former industrial/commercial sites, have become a priority in both state and federal sectors and significant advances have been made in the field of estimating reasonable exposure levels of contaminants in soil vapor. In December 2013, the California Department of Toxic Substances Control/Regional Water Quality Control Board (CRWQCB), considered one of the experts in the field of assessing environmental concerns relating to contaminated soil vapor, updated their 2008 interim report summarizing Tier 1 and Tier 2 environmental screening levels (ESLs) for shallow soil gas vapor intrusion (CRWQCB, 2008 and 2013). At the same time, the EPA released draft soil vapor guidelines that allow the calculation of recommended vapor intrusion screening levels (VISLs) for use in evaluating the soil vapor intrusion pathways at sites/facilities (EPA, 2014b).

TCE was reported in 2001 Site soil vapor samples at concentrations ranging from 0.2 micrograms per liter (µg/L) (or 200 micrograms per cubic meter [µg/m^3]) to 3.4 µg/L (or 3,400 µg/m^3) (DE&S, 2001). These levels exceed both the recommended residential use EPA VISL and CRWQCB ESL for TCE. The recommended target sub-slab and exterior soil gas EPA VISL calculated for TCE based on a default residential land use scenario and a total target risk for carcinogens of 10^{-5} is 21 µg/m^3; the CRWQCB ESL calculated for a residential site user based on a default residential land use scenario and a total target risk for carcinogens of 10^{-5} is 1,000 µg/m^3 (EPA, 2014b; CRWQCB, 2013).

1.2 Site Description and Land Use

The renovated building occupies most of the Site and is a single-story building currently developed as multiple residential housing units with the primary entrance facing Central Avenue (Figure 2). A large well-lit crawlspace is present beneath the front portion of the building (west-end). Three storage/garage units are present on the southeast side of the building and are joined

to outdoor terraces of the main building by shared walls. Low concrete walls or metal fencing surrounds the entire property. Separate metal fencing encloses the storage units and partially separates the Site from the vacant lot to the east-southeast. A line of small evergreen trees/shrubs are also planted along the eastern border, just east of the wire fence. Secure parking for residents of the Site is available west of the building. Residential houses also immediately surround the property with the exception of a vacant lot to the southeast-east beyond which is occupied by retail/commercial space.

Prior to 1947, historical use of the Site was primarily residential. After 1947, historical use transitioned to commercial. From 1947 until 1975, Bell Trading Post occupied the Site building and conducted commercial jewelry manufacturing. The Site building was vacant from 1976 until 1982. From approximately 1982 until 1984, Albuquerque Photo Lab occupied the Site building and performed commercial film development. Finally, from 1985 until 1992, Michelson Metals occupied the Site building, using the property as an office for commodity trading only (office use, nonindustrial) (INTERA, 2005).

1.3 Physical Setting

The following general hydrogeologic description of the Site is excerpted from the 2001 Phase II ESA report (DE&S, 2001).

The Site is located in the south-central portion of the Albuquerque Basin. This basin is one of the largest of the south-trending series of grabens that form the Rio Grande Drainage Basin, which was formed in response to the Rio Grande Rift (Thorn et al., 1993). The Rio Grande Rift is a north- to south-trending, downdropped area extending for more than 600 miles. The rift is an area of crustal extension originating in central Colorado and extending south through New Mexico to south of the Mexico/Texas border.

The Albuquerque Basin is filled with up to 10,000 ft of clastic sediments. These sedimentary deposits are of two types: 1) sediment that has filled the subsiding trough, and 2) floodplain deposits, terraces, dunes, alluvial fans and cones, spring deposits, caliche blankets, landslides, and some pediments. The latter group of deposits represents processes of erosion and deposition which may have prevailed throughout subsidence and filling of the basin (Kelley, 1977). The Santa Fe Formation sediments fill the majority of the basin.

The Tertiary and Quaternary Santa Fe Formation is composed of unconsolidated to loosely consolidated gravels, sands, silts, and clays. The thickness of this unit ranges from 2,400 ft on the basin margins to 14,000 ft along the axis of the basin. In the vicinity of the Site, the thickness of this formation is on the order of 4,700 ft. The Santa Fe Group is overlain by Quaternary sediments, which have a similar facies distribution. These post-Santa Fe deposits are alluvial fan and floodplain deposits that are up to 200 ft thick (Thorn et al., 1993).

The Santa Fe Group and post-Santa Fe deposits are the principal water bearing units in the vicinity of the Site and are hydraulically connected (U.S. Army Corps of Engineers, 1979; Thorn et al., 1993). However, the Albuquerque Basin aquifer is anisotropic laterally and vertically due to spatial variations in the lithology of these two water-bearing units (Chamberlin et al., 1992). Clay layers 12 to 15 ft thick are commonly observed in the alluvium of the Albuquerque Basin; these clay layers restrict vertical movement of water and may locally limit hydraulic interconnection between the shallow Quaternary aquifer and the Santa Fe Group aquifer (Thorn et al., 1993). As a result of spatial variations in lithology, the hydraulic transmissivity of the Albuquerque aquifer varies tremendously, from less than 10 ft^2/day to 80,000 ft^2/day (Thorn et al., 1993). The hydraulic conductivity of the upper part of the Santa Fe Group varies also but is estimated to be approximately 20 ft per day, average in the vicinity of the Site (Thorn et al., 1993).

The water table configuration in the Albuquerque area has changed considerably over time due to population growth and the resulting increases in water pumping and use. Ground water flow in the vicinity of the Site before large-scale ground water development is thought to have been to the southwest and this condition existed at least into the mid- to late-1930s (Thorn et al., 1993). Ground water elevation contours representing 1960–1961 conditions in the Albuquerque area show a continued general southwesterly flow direction on the east side of the Rio Grande; however, a cone of depression is evident in the general area of the Site (Bjorklund and Maxwell, 1961). The cone of depression was primarily the result of pumping the Main Plant well field, previously located in the downtown Albuquerque area. The Main Plant wells were drilled between 1920 and 1948, and consisted of more than 23 wells; this well field is now completely abandoned.

Ground water beneath the Site is believed to flow in an easterly direction. City-wide ground-water contours from 1992, and simulated 1994 hydraulic-head levels, reflect a large cone of depression had developed on the east side of Albuquerque as a result of ground-water withdrawal (Kernodle et al., 1995); this cone of depression appears to have influenced the ground water flow direction beneath the Site and throughout downtown Albuquerque. During implementation of the Phase II ESA (DE&S, 2001), groundwater was encountered at the Site at approximately 20 ft below ground surface (bgs).

1.4 Site Contaminants of Potential Concern

Contaminants of potential concern (COPCs) identified for the Site include:

- volatile organic compounds (VOCs), specifically TCE

VOCs have previously been reported in Site soil vapor collected from within the crawlspace of the current Site Building at levels in excess of the current recommended vapor instruction

guidelines. These reported levels may impact indoor air quality within and around the immediate vicinity of the Site building thus may pose an unacceptable exposure risk to current residents.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS

The following environmental investigations have been previously completed at the Site:

- 1994: Limited subsurface soil investigation by Keers Environmental Services, Inc. (Keers)
- 2000: Phase I ESA by Keers
- 2001: Phase II Site Investigation by Duke Engineering & Services (now known as INTERA)
- 2003: Asbestos and lead-based paint (LBP) Inspection by Rhoades Environmental Inspection Services, Inc. (REIS)

Brief summaries of these Site environmental investigations are provided in the following sections.

Based on results obtained as part of these investigations, the following voluntary remediation activities were completed for the Site by INTERA and their subcontractors in 2005:

- Removal of pigeon-droppings from the Site building.
- Removal of asbestos-containing building materials (ACBM)
- Removal of LBP
- Excavation and removal of lead-containing soils from within the building crawlspace

These voluntary remediation activities are fully documented in INTERA's Final Voluntary Remediation Completion Report for the Site (INTERA, 2005).

2.1 1994 Subsurface Soil Investigation

During the 1994 Site subsurface soil investigation, Keers collected 10 surficial soil samples (surficial soil samples SS-01 through SS-10) from within the building crawl space (Keers, 1994). The surficial soil samples were collected from areas with high potential for contamination (e.g., from under drains, sumps, and piping) and analyzed for VOCs, total cyanide, and Resource Conservation and Recovery Act (RCRA) metals. Silver was identified at a concentration of 134 milligrams per kilogram (mg/kg) in surficial soil sample SS-07 and chromium and lead concentrations of 174 mg/kg and 1,670 mg/kg, respectively, in surficial soil sample SS-09. No other constituents were detected.

Based on these results, two additional subsurface soil samples (SS-07, depth 5 ft and SS-09, depth 5 ft) were collected from surficial sampling locations SS-07 and SS-09 and analyzed for the detected constituents via toxicity characteristic leaching procedure (TCLP). These samples reported <0.010 mg/kg for silver at SS 07 and 0.047 mg/kg for chromium and 0.890 mg/kg for lead at SS-09. Keers concluded that TCLP results "indicated that contaminants are well below current EPA regulatory limits" (Keers, 1994).

With the exception of lead in surficial soil sample SS-09, the analytical results for the RCRA metals reported by Keers are below current NMED soil screening levels (SSLs) for residential land use (NMED, 2012). The soil sample concentration of lead (1,670 mg/kg) identified by Keers in surficial soil sample SS-09 was the impetus for the lead-containing soil removal activities conducted in as part of the 2005 voluntary remediation activities at the Site.

2.2 Phase I Environmental Site Assessment

A Phase I ESA was completed for the Site by Keers in December 2000 (Keers, 2000). The Phase I ESA reported the following environmental Site concerns:

- An active Underground Storage Tank (UST) site was identified approximately one-eighth of a mile northwest of the Site. The UST site is identified as The World Motel at 1721 Central Avenue NW. The NMED Underground Storage Tank Bureau indicated that a release of gasoline has impacted groundwater hydraulically ugradient of the Site. Keers recommended a periodic review of the most current leaking UST information to determine and assess the extent of soil or groundwater contamination, if any, that may be caused by the up-gradient active leaking UST site and possibly impact the Site.
- The age of the structure located on this Site indicates the potential for construction materials containing either ACBM or LBP or both.
- The Site location in a designated flood zone indicates the potential for environmental impact during a major flood event.

2.3 Phase II Site Investigation – DE&S/INTERA

Duke Engineering & Services (DE&S) (now known as INTERA) completed a Phase II Site Characterization for the Site in November 2001 (DE&S, 2001). Among the Phase II objectives was to investigate impacts to Site soils and ground water from previous site activities (i.e., impact from solvents, cyanide, or heavy metals used in the jewelry manufacturing or commercial film development activities). INTERA advanced 12 Geoprobe® soil borings and submitted 13 soil samples, 13 soil gas samples, and four ground water samples for laboratory analysis. The soil samples were analyzed for the presence of cyanide and heavy metals. Although two soil samples were identified to contain arsenic and iron (naturally occurring metals) at levels above NMED SSLs, the levels were determined to be well within natural variance levels for soils in the

southwestern United States and no further investigation was initiated. The 2001 soil gas and groundwater sampling locations are depicted on Figure 3.

Soil gas samples were analyzed for VOCs. The ground water samples were analyzed for cations and anions, pH, VOCs, cyanide, and heavy metals. The results of the soil gas sampling indicate that a chlorinated solvent release may have occurred at the Site some time ago. TCE was reported in 2001 Site soil vapor samples at concentrations ranging from 0.2 µg/L (200 µg/m^3) to 3.4 µg/L (3,400 µg/m^3) (DE&S, 2001). These levels exceed both the recommended residential use EPA VISL and CRWQCB ESL for TCE (EPA, 2014b; CRWQCB, 2013).

The results of the ground water sampling identified volatile organic compounds in ground water samples at concentrations below New Mexico Water Quality Control Commission (NMWQCC) standards. TCE was the only VOC compound identified reported above laboratory method detection limits. TCE was reported from the two samples (primary and field duplicate [FD]) collected from soil boring SB-12, at a concentration of 1.5 µg/L, well below the TCE New Mexico Ground Water Standard (NM-GS), defined by NMWQCC as 100 µg/L (NMED, 2004).

2.4 REIS Limited Asbestos and LBP Survey

On behalf of INTERA, Mr. Ronald K. Rhoades of REIS, performed a limited asbestos and LBP inspection survey at the Bell Trading Post Facility building in July 2003. The purpose of this limited asbestos survey was to sample readily accessible ACBM and LBP-containing building materials that may have been used in the construction or any subsequent renovation of the building. ACBM and LBP-containing building materials were identified at the Bell Trading Post Facility. LBP was not detected by REIS in samples collected from exterior painted surfaces.

3.0 2014 LIMITED PHASE II SITE INVESTIGATION ACTIVITIES

From May 28 to June 2, 2014, INTERA and their subcontractors completed the following activities in support of additional soil vapor characterization for the Site:

- Exterior to the Site Building:
  - advanced a total of three (3) soil borings to an approximate total depth (TD) of 3 ft bgs and extracted soil vapor from each borehole for laboratory analysis; and,
  - collected a time-integrated outdoor air sample representative of “ambient” conditions over an 8-hour period for VOC analysis.
- Within the Site Building:
  - advanced a total of two (2) soil borings within the warehouse crawlspace to an approximate TD of 2 ft bgs and extracted soil vapor from each borehole for laboratory analysis; and,

  - collected four air samples (2 “source” air samples within the warehouse crawlspace; 2 “ambient” air samples within occupied/communal areas) over an 8-hour period for VOC analysis.

- Submitted all air samples to the analytical contract laboratory, Hall Environmental Analysis Laboratory, Inc. (HEAL), of Albuquerque, New Mexico, for analysis of VOCs via EPA Method TO-15 Select Ion Monitoring (SIM).
- Submitted all soil gas samples to the contract laboratory, Vista Geoscience LLC (VISTA) of Golden, Colorado, for analysis of VOCs via EPA Method 8260 using a ATD-gas chromatograph /mass spectrometer (GCMS).
- Managed investigation-derived waste (IDW).
- Compared analytical results for soil gas/air samples to applicable regulatory or technical standards/guidance to determine the level of impact at the Site (**Section 4**).

Details regarding completed Phase II ESA activities and sample collection methodology are presented in the **Sections 3.1 to 3.3** below. Field quality assurance (QA)/Quality Control (QC) procedures implemented during the Limited Phase II Activities are summarized in **Section 3.4**. Any deviations from the project-specific SAP/QAPP that occurred during the Limited Phase II ESA field execution are discussed in **Section 3.5**. A discussion of the corresponding Limited Phase II ESA analytical results are presented in **Section 4**.

3.1 Pre-Mobilization Activities

Prior to initiating any field investigation, the following planning and initial field mobilization activities are typically required:

- Obtain Site access agreement(s) from Site current land owners/representative(s);
- Complete all necessary permits and applications as required through applicable regulatory agencies;
- Identify, mark, and assess the degree to which any utilities may be impacted; and,
- Identify and establish all necessary and proper health and safety procedures for safe and effective implementation of the proposed activities.

For this investigation, full Site access was granted to NMED and/or its designees by the current Site owner, FHDC, as documented by the access agreement, a copy of which is included in Appendix A. On May 23, 2014, INTERA contacted New Mexico One Call to identify the locations of underground utilities at the Site. Health and safety procedures for safe and effective implementation of the soil gas/air sampling were established in the approved SAP/QAPP and accompanying site-specific health and safety plan [HASP] (INTERA, 2014, Appendix C) but Site sampling conditions were also verified prior to project initiation. On May 28, 2014,

INTERA performed a Site visit to (1) confirm all utility locates and all proposed sampling locations had been properly marked (2) meet/debrief the current Site owner/representative regarding the upcoming activities and (3) establish the current condition of the building crawlspace and determine the need for any additional equipment prior to proceeding with sampling.

No permits or applications were needed to conduct the soil gas/air sampling at the Site.

3.2 Characterization Sampling of Soil/Gas and Air

On June 2, 2014, ambient air and soil gas samples were collected from the locations depicted on Figure 3. All locations were recorded in the field post-sample collection.

Soil gas samples were collected in sorption tubes via vacuum using a system comprised of coring/drill rod; a Post-Run Tubing (PRT) adapter tool; clean, dedicated Teflon-lined polyethylene tubing (for sample collection); and a peristaltic pump equipped with a flow regulator and bi-way valve. First, core/drill rod equipped with an expendable drive-point was manually driven to the target soil gas sampling depths of 2 or 3 ft bgs using a heavy slide hammer. The rod was then retracted approximately 4 to 6 inches to drop the drive point and create a void at the end of the rod from which to collect a soil gas sample. A Teflon® lined (¼-in or ⅜-in) tube and threaded adaptor was then inserted into the rod and threaded into the PRT tool at the bottom of the sample hole. The tubing was connected to both a portable peristaltic pump, which provided the vacuum for sample extraction, as well as a photoionization detector (PID)/combustible gas indicator (CGI) to monitor VOCs and CO_2 and O_2 levels, respectively, during sample purging and collection. The system was then purged and upon stabilization, a soil vapor grab sample was collected into a loaded sorbent tube using dedicated sample tubing and a pump equipped with a flow meter. Flow was monitored to help ensure that the rate at which the soil gas sample was extracted stayed within the recommended extraction rate of 200 mL/minute.

At each soil gas sample location, two (2) sorbent tubes were collected. This duplication effort in sampling was performed to ensure that a duplicate sample from each location was available for laboratory analysis, if a second run on any sample was required (e.g., laboratory instrument failure, operator error, etc.).

Air samples were collected in clean, dedicated, 6L SUMMA canisters equipped with 8-hour regulators. The SUMMA canisters were provided to INTERA by HEAL. The SUMMA canisters were deployed in the morning and the regulator valve opened to initiate air sample collection. The canisters were then retrieved after a period of 8 hours. Initial and final canister pressures were recorded upon deployment and retrieval, respectively.

Per the SAP/QAPP, all samples were labeled with the appropriate sample identification number (ID) and any other parameter as specified by the analytical laboratory with indelible ink and properly stored on-Site until sample custody could be transferred to the selected offsite laboratory for analysis. On-Site storage and handling of each soil vapor sample included placement in dark plastic bags within a cooler containing ice.

Upon sample collection, all samples were either shipped via Federal Express (sorption tubes to the VISTA Geoscience laboratory in Golden, Colorado) or physically transferred (SUMMA canisters to HEAL in Albuquerque, New Mexico) the same day they were collected at the Site. Sample transfer was documented on the appropriate sample chain-of-custody form(s).

All reusable sampling equipment such as the PRT and drive rod was decontaminated prior to each use. Decontamination was conducted by scrubbing the outside of the equipment with a brush in a solution of water and nonphosphate detergent (Alconox or Liquinox) and double rinsing equipment with distilled water. Excess decontamination water was then wiped off tools exteriors and the inside allowed to air dry prior to re-use. No decontamination was required of the soil gas sample tubing as disposable dedicated sample tubing was utilized at each sample location.

A photo log documenting the Limited Phase II ESA characterization sampling activities is provided in Appendix B. Specifics regarding the characterization sampling conducted as part of the Limited Phase II efforts at the Site are provided in the following subsections.

3.2.1 Soil Vapor Sampling Outside the Site Building

Six (6) soil gas vapor grab samples (sample IDs: SG-01-249471, SG-01-249472, SG-02-249479, SG-02-249480, SG-03-249473, SG-03-247803) were collected from three locations (SG-01 through SG-03) exterior to the Site Building (Figure 3). The soil gas vapor samples were collected from the Site shallow subsurface at approximately one foot below the base of 1.5-in diameter soil borings, approximately 1.5 to 2 ft bgs. These soil borings were advanced using an concrete coring bit on the morning of June 2, 2014, by INTERA's subcontractor, Concrete Coring Services, to clear each soil vapor sample location of concrete/asphalt surface layer and expose the native substrate soils for soil gas sampling.

Prior to collecting a sample at each location, the sample system was purged a minimum of three volumes or until CO_2 and O_2 levels stabilized to ensure that any residual air remaining in the system had been removed. VOCs levels were also monitored during purging using a PID. All screening/flow parameters were recorded on the appropriate sample collection log and/or the field log book, copies of which are provided in Appendix C.

Once purging was complete, two (2) soil vapor grab samples were collected at each location into sorbent tubes using the pump equipped with a flow meter. During extraction of the first soil gas

sample at SG-01 (SG-01-2490471), flow was inconsistent and the team had difficulty keeping the flow under the target extraction rate. To resolve this for subsequent soil gas samples, a valve was placed between the pump and the flow meter which reduced system air flow and enabled sampling efforts to continue with consistent extraction of soil gas at a rate at or just below 200 mL/minute.

After 1 liter of soil gas flowed through the sorbent tube, flow was shut off and the sorbent tube was removed, resealed, tagged with the sample ID, and placed in a labeled bag. Specifics regarding each sample were recorded on the corresponding chain-of-custody form (s), copies of which are provided in Appendix D. Samples were then prepared for shipment to VISTA for analysis of VOCs via EPA Method 8260B.

Upon completion of soil gas sample collection, the borings were backfilled to the surface with sand and an asphalt (SG-01 and SG-02) or cement (SG-03) patch put in-place, as appropriate. Any cuttings derived from the coring efforts (minimal amount of material) were placed back in the soil boring prior to backfilling. Surface completions were mounded slightly above the surrounding pavement (1/4-in) at the request of the current Site owner/representative.

3.2.2 Soil Vapor Sampling Within the Site Building Crawlspace

A total of four (4) soil gas vapor grab samples (sample IDs: SG-04-249477, SG-04-249478, SG-05-247808, SG-05-249476) were collected from two locations (SG-04 and SG-05) within the crawlspace of the Site Building (Figure 3). The two soil borings were advanced below the dirt floor of the crawlspace to a TD of approximately 2 ft bgs. Although, the original target TD for these samples was approximately 1 ft bgs, a decision was made to advance an extra foot due to the relatively loose soils within the Site building crawlspace to try and ensure extraction of subsurface soil vapor only. The crawlspace dehumidifier was also turned off prior to and during the crawlspace sample collection efforts to help ensure minimal draw and prevent possible dilution of the soil vapor samples.

At each location, two samples were collected into sorbent tubes after the sampling system had been purged a minimum of three volumes and/or until CO_2 and O_2 levels stabilized. VOCs levels were also monitored during purging using a PID. All flow parameters/screening results recorded on the appropriate sample collection log and/or the field log book (Appendix C).

All four samples were then prepared for shipment to VISTA for analysis of VOCs via EPA Method 8260B.

Upon completion of soil gas sample collection, no backfill of the borings was required as the boreholes collapsed immediately after the drill pipe was removed due to soft unconsolidated soils at the near surface.

3.2.3 Air Sampling

A total of five (5) time-integrated air samples were collected in SUMMA canisters at locations: C-01 and C-02; I-01 an I-02; and O-01 (Figure 3) as follows:

- two (2) "source" air samples within the Site building crawlspace (sample IDs: Air-C-01 and Air-C-02);
- two (2) "ambient" air samples within common/occupied areas of the Site Building (sample IDs: Air-I-01 and Air-I-02); and,
- one (1) "ambient" air sample exterior to the Site Building (sample ID: Air-O-01).

After the 8-hr sampling period elapsed, all SUMMA canisters were closed, collected, and packaged for shipment. A HEAL representative mobilized to the Site and collected the SUMMA canister package from INTERA and shipped the package via Fedex overnight delivery to ESC Lab Sciences of Mt. Juliet, Tennessee. ESC analyzed each SUMMA canister for the presence of VOCs via EPA Method TO-15 SIM. Sample custody transfer was documented on appropriate sample chain-of-custody form(s), copies of which are provided in Appendix D.

3.3 Investigation-Derived Waste Management

Implementation of the Limited Phase II ESA field activities generated limited amounts of the following IDW:

Used personal protective equipment (PPE) (e.g. gloves),

Used disposable sampling tubing and sampling equipment,

Equipment decontamination water, and

Miscellaneous waste (paper towels used for decontamination etc.).

Due to the low level of contamination expected to be present on these waste streams, these IDW waste steams were managed as nonhazardous solid waste. Non liquid waste (e.g. used PPE, wipes, sample tubing etc.) was containerized in plastic bags, sealed, and disposed of in a general refuse dumpster. Any liquid waste generated during equipment decontamination procedures was disposed of by distributing across an impermeable surface at the Site and allowed to evaporate.

3.4 Field Quality Assurance/Quality Control

During execution of the Limited Phase II ESA, the following samples were collected to measure precision and accuracy in accordance with the specified QA/QC requirements outlined in the SAP/QAPP: field trip blank and FDs. The SAP/QAPP identified a soil gas field trip blank to be submitted along with the samples to ensure no contamination was introduced during sorbent tube storage and transport. This QA sample was not formally collected because an extra sorbent tube was not sent by VISTA. A single field trip blank for the project was collected and analyzed for VOCs by EPA Method 8260B (see discussion below). No field equipment rinsate sample(s) were

collected during this field investigation as air and soil gas vapor samples were collected using dedicated, disposable sampling equipment.

Though duplicate samples were collected at all soil gas sampling locations as described in **Section 3.2**, only the duplicate from Location SG-03 (SG-03DUP) was initially submitted to VISTA laboratory as an FD and analyzed for the same set of parameters as the primary sample. Analysis of one FD represents approximately 10% of the total number of samples collected for analysis as part of this investigation and fulfills the minimum amount of sample duplication efforts recommended for a valid field QA program (INTERA, 2014a). The association of the FD with the primary sample was recorded on appropriate sample forms and on the chain-of-custody (Appendix D).

The intent was to compare results between the primary investigation sample collected from Location SG-03 with the results obtained from the FD via a relative percent difference (RPD) analysis to aid in the evaluation of laboratory precision and sample collection method consistency. However, upon receipt and analysis of the sorbent tube SG-03DUP, it was observed that the tube was clean (no response on the GCMS) and was alternatively, in effect, a field trip blank: No constituents were detected in the sample above reporting limits (RLs).

At the request of INTERA, VISTA analyzed all remaining sorbent tube duplicates and reported the soil gas vapor sample results at Location SG-02 for the purposes of the RPD analysis. Results of the duplicate RPD analysis for samples collected at Location SG-02 are presented on Table 1.

3.5 Deviations

The following deviations from the SAP/QAPP occurred during performance of the 2014 Limited Phase II ESA field activities:

Soil gas sample collection - For soil gas samples collected within the crawlspace of the Site Building the target TD for sample collection was defined in the approved SAP/QAPP at 1 ft bgs. This was based on an assumption that crawlspace conditions were confined with poor air circulation and that the soil at the near surface was relatively hard and consolidated. However, a Site inspection performed by INTERA on May 28, 2014, prior to field mobilization, found that crawlspace conditions had changed since Site redevelopment. Air flow was assisted throughout the entire air space by dehumidifiers and fans, the crawlspace was well lit, and the near soil at the surface was relatively loose. Based on these observations, a decision was made to advance an extra foot below the floor of the crawlspace to minimize the inadvertent draw of ambient crawlspace air into the sample during soil gas extraction.

Field QA Program - the approved SAP/QAPP identified the need for a field trip blank to be assigned for the soil gas sampling efforts. A designated field trip blank was not identified for use during sample collection, storage, and transport of the sorbent tubes; however, as discussed in **Section 3.4** above, Sample SG-03DUP inadvertently became a field trip blank for the investigation.

4.0 LIMITED PHASE II CHARACTERIZATION SAMPLING RESULTS

Site VOC data collected from both soil gas and air were evaluated to further assess potential soil vapor and indoor air impacts associated with former industrial operations at the Site. In this section, INTERA presents the results of these data collection and assessment activities with respect to applicable regulatory or technical guidelines below as well as discusses these results relative to previous environmental data obtained for the Site.

4.1 Technical or Regulatory Guidelines

As summarized in the approved SAP/QAPP, both EPA and NMED are the primary decision makers regarding this Site (INTERA, 2014a); therefore, the recommended guidelines for assessing soil vapor concerns considered most applicable to this Site are the EPA VISLs for a sub-slab and/or exterior soil gas exposure, updated May 2014 (EPA, 2014b). The recommended guidelines for assessing air quality at the Site considered most applicable are the EPA regional screening levels (RSLs) for indoor air, updated May 2014 (EPA, 2014a).

Any Site VOC constituent for which an EPA VISL or RSL was not available, the corresponding CRWQCB Tier 1 ESL, if listed, for shallow soil gas vapor or air was referenced and utilized to assess potential environmental impact.

VOCs in both Site soil gas and air were evaluated using the recommended default parameters and exposure factors reflective of a residential use scenario, the current and foreseeable future land use of the Site. For the evaluation of carcinogenic VOCs, EPA RSLs and VISLs and, if applicable, CRWQCB Tier 1 ESLs, were adjusted to reflect a total target carcinogenic risk of 10^{-5}. Assigning a less conservative total target carcinogenic risk of 10^{-5} is standard practice for assessing carcinogenic risk within the State of New Mexico as described in the NMED document, Risk Assessment Guidance for Site Investigations and Remediation (NMED, 2012). If non-carcinogenic ESL is lower than 10^{-5} carcinogenic screening level, the lower (more conservative) ESL should be used.

4.2 Soil Gas

Six soil gas samples were analyzed by VISTA via EPA Method 8260 on June 12, 2014. All sample locations are depicted on Figure 4. The 2014 soil gas analytical results are summarized in Table 2. The locations of elevated (in excess of EPA VISLs) soil vapor VOC concentrations are

shown on Figure 4. A copy of the complete analytical report for soil vapor is provided in Appendix D.

In Site soil vapor, 26 out of the 71 VOCs analyzed were found to be present in one or more samples at concentrations above RLs. Of these COPCs, chloroform, naphthalene, and TCE were present in one or more samples at concentrations in excess of EPA VISLs (Table 2, Figure 4). All three of these VOCs were identified in soil vapor collected from locations SG-02 and SG-03 situated along on the north/west perimeter of the building. Chloroform was reported at a concentration of 7.7 µg/m^3 at SG-02 and 29 µg/m^3 at SG-03. The corresponding EPA VISL for chloroform in sub-slab/exterior conditions (adjusted for a total target cancer risk of 10^{-5}) is 12 µg/m^3. Chloroform was not identified in soil vapor above RLs at any other locations.

Naphthalene was present in soil vapor at all locations except SG-04. At locations SG-02 and SG-03 naphthalene was reported at concentrations of 8.7 µg/m^3 and 5.4 µg/m^3, respectively: the corresponding EPA VISL for naphthalene in sub-slab/exterior conditions (adjusted for a total target cancer risk of 10^{-5}) is 8.3 µg/m^3. Naphthalene was also reported at Location SG-01 and SG-05 but at trace concentration (at or below the quantitation limit [RL]).

TCE was reported in soil vapor at SG-02 at a minimum concentration of 1,800 µg/m^3. Exact quantitation of TCE at this location could not be evaluated due to limitation of the analytical method's maximum quantitation limit/method detection limit (MDL) (Appendix D). This reported concentration far exceeds the recommended EPA VISL for TCE of 21 µg/m^3. TCE was also reported in soil vapor at locations SG-03 and SG-05 but the reported TCE concentrations at these locations were significantly less (11 µg/m^3 and 14 µg/m^3, respectively) and below recommended screening levels.

4.3 Air

Five SUMMA canisters were analyzed by ESC Lab Sciences (a HEAL subcontracted laboratory) via EPA Method TO-15 SIM on June 8, 2014. Analytical results are summarized in Table 3. All SUMMA canister sample locations are shown on Figure 5. The locations of elevated VOC concentrations in air (in excess of EPA RSLs) are depicted on Figure 5. A copy of the complete analytical report for air is provided in Appendix D.

Of the 22 VOCs analyzed, the following were found to be present in one or more air samples at concentrations above RLs: benzene, carbon tetrachloride, chloroethane, chloroform, cloromethane, 1,4-dichlorobenzene, ethylbenzene, PERC, TCE and vinyl acetate. Of these COPCs, only chloroform was definitively present at concentrations in excess of the EPA RSL (Table 3, Figure 5).

Chloroform was identified in both air samples collected within the Site building crawlspace at the following concentrations: 1.5 µg/m^3 in sample Air-C-01 and 1.7 µg/m^3 in sample Air-C-02: the corresponding EPA RSL for chloroform in indoor air (adjusted for a total target cancer risk of 10^{-5}) is 1.2 µg/m^3.

In addition to chloroform, 1,2-dibromoethane (EDB), was also retained as a Site COPC in air due to an insufficient lower MDL. A known carcinogen, EDB can cause a variety of acute health effects, primarily through inhalation. Although EDB was not present above RLs in any of the air samples collected at the Site, the EPA RSL for EDB in indoor air is very conservative, 0.05 µg/m^3. The current MDL for EDB via EPA Method TO-15 SIM is 0.15 µg/m^3. Therefore, current data is not sufficient to accurately assess the potential environmental risk(s) posed by EDB because the MDL is higher than the respective EPA RSL for EDB.

4.4 Evaluation of Site Soil Gas and Air

Previous assessment of soil gas at the Site indicates a possible historic release of chlorinated solvents, specifically TCE, may have occurred at the Site as a result of former Site operations (DE&S, 2001). Elevated levels of TCE (3,400 µg/m^3) were identified in the 2001 soil gas sample collected at location SB-03 (Figure 3) immediately north of the building along Laguna Blvd.

The 2014 Limited Phase II ESA investigation results confirm the presence of elevated TCE in soil vapor in the northwestern section of the Site. Chloroform, naphthalene, and TCE were all identified in soil vapor collected both north and within the northwest driveway of the building (Locations SG-02 and SG-03).

Air samples collected as part of the 2014 Limited Phase II ESA investigation in the Site building crawlspace also indicate subsurface transport of VOCs is occurring beneath the Site building. Chloroform was identified in air collected from the Site building crawlspace at concentrations above EPA RSLs. However, no VOCs were detected in air at levels of concern within occupied areas of the Site building. This is likely due to the condition of the Site building floor and the ventilation system that operates within the Site building crawlspace. The ventilation system appears to maintain good air flow and air exchange beneath the Site building thus limiting the accumulation of VOCs in air within the crawlspace.

Both chloroform and TCE are known metal degreasing solvents that were extensively used by the jewelry manufacturing industry. Both halogenated aliphanes, these constituents degrade far more slowly than some other VOCs (such as halogenated aromatics) and mainly under anaerobic conditions (EPA, 1993).

5.0 CONCLUSIONS AND RECOMMENDATIONS

Current available data indicate that an acute release of chlorinated solvents, specifically TCE and chloroform, historically occurred at the Site or within the immediate vicinity of the Site most likely during the Site's operation as a jewelry manufacturing facility. Environmental investigation data indicates that TCE and chloroform are present in soil vapor within the northwest corner of the Site, at approximately the Roma Ave and Laguna Blvd intersection (2001 Location SB-03, Figure 3). Concentrations appear to quickly dissipate to the east and west and less so to the south, suggesting a potential south/southwest trending vapor plume that extends underneath the current Site building. The extent of the plume appears to be contained within the Site property to the east, west, and south; however, no data currently exists to assess soil vapor VOC concentrations across Laguna Blvd, immediately north/northwest of the Site.

Based on current documentation regarding Site history and use, the source of the chlorinated solvents was likely a result of the Site's former jewelry manufacturing operations. The Phase I ESA report completed by Keers in 2000 identified no specific impacts to the Site from other facilities within ASTM-specified search distances (Keers, 2000). Both TCE and chloroform are relatively immune to dechlorination under vadose (aerobic) conditions and will continue to slowly diffuse and/or migrate upward through the subsurface as soil vapor.

Current data indicates that the VOC levels do not pose an immediate risk to the current residents of the Site building. The levels of TCE and chloroform measured in air within the living areas of the Building are below EPA RSLs for residential use. The risk associated with EDB, though not identified above the MDL in any of the air samples, could not be evaluated with regard to its respective EPA RSL.

Maintaining the VOC concentrations below levels of concern is likely dependent on continued operation of a well-ventilated Site building crawlspace. The levels of VOCs present in indoor air may also be impacted by changes in the barometric pressure which can have a seasonal fluidity. For example, changes in humidity, the use of heating/cooling systems within the building, and variable water use outside the building can all impact the rate at which soil gas migrates upward within the subsurface.

As such, INTERA recommends the following actions to be completed for the Site:

- Perform additional limited soil vapor sampling north/northwest of the Site to determine northern lateral extent of the chlorinated solvent plume,
- Ensure maintenance and continued operation of the Site building's crawlspace ventilation system, and

- Conduct air sampling within occupied areas of the Site building and the Site building crawlspace quarterly for a period of at least one year to generate a baseline for the evaluation of potential seasonal influences to indoor air quality and to address any future concerns regarding air quality at the Site.

6.0 REFERENCES

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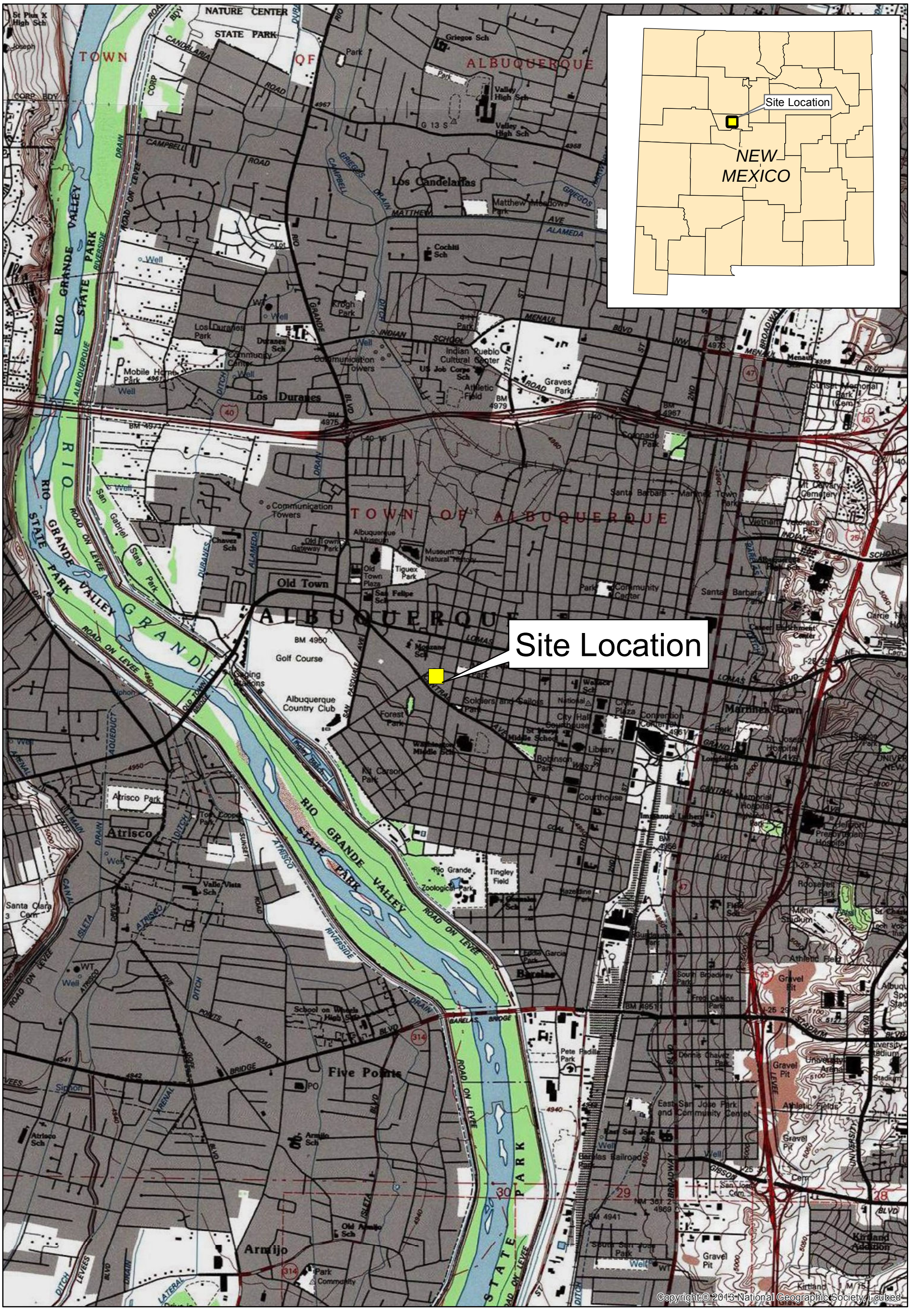
.

FIGURES



N

0 1,000 2,000 4,000 Feet

Sources:
Topo – ArcGIS online/USGS

Figure 1
Site Location Map
Former Bell Trading Post Property,
Albuquerque, New Mexico

S:\Projects\NMENV_M001_GWQB\Bell Trading Post\Graphics\GIS\MapDocs\PhaseII_Jun2014\01_SiteLocation.mxd 6/19/2014

N

0 50 100 Feet

Legend

Previous Soil Sampling Area (basement/crawl space)
Source:

Source(s): Aerial - BERNCO website, dated 2012

Figure 2
Site Map
Former Bell Trading Post Property,
Albuquerque, New Mexico

FILE: S:\Projects\NMENV_M001_GWQB\Bell Trading Post\Graphics\GIS\MapDocs\PhaseII_Jun2014\02_SitePlan.mxd 6/19/2014

N

0 50 100 Feet

Legend

2014 Sample Locations

- Soil Gas Vapor Sampling Location
- Air Sampling Location (within occupied building)
- Air Sampling Location (within crawlspace)
- Ambient Air Sampling Location

Historic Sample Locations

- Soil and Groundwater Sampling Location (4 total)
- Soil Sampling Location (8 total)

Source(s): Aerial - BERNCO website, dated 2012

INTERA

Figure 3
Soil Gas and Air Sampling Locations
Former Bell Trading Post Property,
Albuquerque, New Mexico

FILE: S:\Projects\NMENV_M001_GWQB\Bell Trading Post\Graphics\GIS\MapDocs\PhaseII_Jun2014\03_SampleLocs.mxd 6/23/2014

N

0 50 100 Feet

Legend

- Soil Gas Vapor Sampling Location
- Air Sampling Location (within occupied building)
- Air Sampling Location (within crawlspace)
- Ambient Air Sampling Location

Sample ID
Chloroform result in µg/m^3
Naphthalene result in µg/m^3
Trichloroethene(TCE) result in µg/m^3

BOLD/ITALIC indicates constituent detected in excess of the recommended standard/guidance

Source(s): Aerial - BERNCO website, dated 2012

Figure 4
VOC Concentrations in Soil Gas
Former Bell Trading Post Property,
Albuquerque, New Mexico

FILE: S:\Projects\NMENV_M001_GWQB\Bell Trading Post\Graphics\GIS\MapDocs\PhaseII_Jun2014\04_SoilGasVOC.mxd 6/23/2014

N

0 50 100 Feet

Legend

- Soil Gas Vapor Sampling Location
- Air Sampling Location (within occupied building)
- Air Sampling Location (within crawlspace)
- Ambient Air Sampling Location

Sample ID
Chloroform result in µg/m^3

BOLD/ITALIC indicates constituent detected in excess of the recommended standard/guidance

Source(s): Aerial - BERNCO website, dated 2012

Figure 5
VOC Concentrations in Air
Former Bell Trading Post Property,
Albuquerque, New Mexico

FILE: S:\Projects\NMENV_M001_GWQB\Bell Trading Post\Graphics\GIS\MapDocs\PhaseII_Jun2014\05_AirVOC.mxd 6/23/2014

TABLES

TABLE 1
Relative Percent Difference Analysis
Bell Trading Post Property
Albuquerque, Bernalillo County, New Mexico

Constituent	Location/Sample ID	Reported Concentration (µg/m3)	Approximate RPD (%)
(cis)-1,2-dichloroethene	SG-02	1.9	18
	SG-02DUP	1.6	
(trans)-1,2-dichloroethene	SG-02	2.1	**200**
	SG-02DUP	<5.0	
1,1,1-Trichloroethane	SG-02	1.6	**23**
	SG-02DUP	1.3	
1,2,4-Trimethylbenzene	SG-02	19	**200**
	SG-02DUP	<5.0	
1,3,5-Trimethylbenzene	SG-02	3.5	**200**
	SG-02DUP	<5.0	
1,3-Dichlorobenzene	SG-02	4.3	**200**
	SG-02DUP	<5.0	
2-Butanone	SG-02	70	**41**
	SG-02DUP	46	
2-Hexanone	SG-02	20	**91**
	SG-02DUP	7.3	
4-Methyl-2-pentanone	SG-02	20	**70**
	SG-02DUP	9.6	
Acetone	SG-02	400	**21**
	SG-02DUP	320	
Benzene	SG-02	11	5
	SG-02DUP	10	
Carbon disulfide	SG-02	8.7	**21**
	SG-02DUP	11	
Chloroform	SG-02	7.7	12
	SG-02DUP	6.8	
Ethylbenzene	SG-02	41	**136**
	SG-02DUP	7.8	
Methylene chloride	SG-02	1.3	1
	SG-02DUP	1.3	
Naphthalene	SG-02	8.7	**200**
	SG-02DUP	<5.0	
n-Butylbenzene	SG-02	1.5	**200**
	SG-02DUP	<5.0	
n-Propylbenzene	SG-02	2.6	**200**
	SG-02DUP	<5.0	
Tetrachloroethene (PERC)	SG-02	12	5
	SG-02DUP	12	
Toluene	SG-02	67	8
	SG-02DUP	62	
Trichloroethene (TCE)	SG-02	1,800	0
	SG-02DUP	1,800	
Trichlorofluoromethane	SG-02	4.7	15
	SG-02DUP	4.1	
m,p-Xylene	SG-02	200	**189**
	SG-02DUP	5.7	
o-Xylene	SG-02	82	**194**
	SG-02DUP	1.3	

Notes:

Includes detected constituents only.

Bolding indicates constituent RPD in excess of the recommended 20% (INTERA, 2014a)

< = constituent not detected above RL. RL is reported.

µg/m^3 = micrograms per cubic meter

RL = reporting limit

TABLE 2
Detected Constituents in Soil Vapor
Bell Trading Post Property
Albuquerque, Bernalillo County, New Mexico

Location/Sample ID	Collection Date	Concentration (µg/m^3)																							
		(cis)-1,2-dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	2-Butanone	2-Hexanone	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chloroform	Dichlorodifluoromethane	Ethylbenzene	Naphthalene	n-Propylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PERC)	Toluene	Trichloroethene (TCE)	Trichlorofluoromethane	Total Xylenes[c]
EPA VISL[a] (µg/m^3)		**NaV**	**52,000**	**73**	**NaV**	**NaV**	**52,000**	**310**	**NaV**	**31,000**	**320,000**	**36**	**7.6**	**7,300**	**12**	**1,000**	**110**	**8.3**	**10,000**	**10,000**	**NaV**	**420**	**52,000**	**21**	**7,300**	**1,000**
CRWQCB ESL[b] (µg/m^3)		**3,700**	**2,600,000**	**NaV**	**NaV**	**NaV**	**2,600,000**	**NaV**	**NaV**	**210,000**	**15,000,000**	**420**	**330**	**NaV**	**2,300**	**NaV**	**4,900**	**360**	**NaV**	**470,000**	**NaV**	**2,000**	**160,000**	**3,000**	**NaV**	**52,000**
SG-01	6/2/2014	<5.0	<5.0	34	*10*	<5.0	21	<5.0	<5.0	19	170	14	<5.0	25	<5.0	1.7J	51	4.1J	10	<5.0	<5.0	<5.0	140	<5.0	4.5J	180
SG-02	6/2/2014	1.9J	1.6J	19	*3.5J*	*4.3J*	70	20	<5.0	20	400E	11	<5.0	8.7	7.7	<5.0	41	**8.7**	2.6J	<5.0	<5.0	12	67	**1,800E**	<5.0	280
SG-03	6/2/2014	<5.0	<5.0	14	*7.3*	*5.8*	<5.0	<5.0	*33*	9.2	85	7.7	5.4	4.8J	**29**	2.3J	12	5.4	2.1J	2.7J	*1.6J*	1.5J	28	11	4.1J	54
SG-04	6/2/2014	<5.0	<5.0	<5.0	<5.0	*1.9J*	<5.0	<5.0	<5.0	<5.0	57	3.9J	<5.0	12	<5.0	2.5J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	51	<5.0	3.0J	<10
SG-05	6/2/2014	<5.0	<5.0	5.0J	<5.0	*3.4J*	<5.0	<5.0	<5.0	<5.0	73	4.0J	<5.0	3.4J	<5.0	3.3J	2.7J	3.5J	<5.0	1.3J	<5.0	<5.0	11	14	4.7J	8.7J

Notes:

Bolding indicates constituent detected in excess of the recommended standard/guidance.

Italics indicates constituent detected and no recommended standard/guidance to address vapor intrusion concerns currently exists.

With the exception of total xylenes, the RL for all reported constituents is 5.0 µg/m^3; the RL for total xylenes is 10.0 µg/m^3.

a =EPA VISL calculated based on a default residential land use scenario and a total target risk for carcinogens of 10^{-5} (EPA, 2014).

b =Tier 1 CRWQCB ESL for soil vapor based on a default residential land use scenario (CRWQCB, 2013). Adjusted for carcinogens to represent a total target cancer risk of 10^{-5}.

c =Total xylenes calculated as the sum of the detected constituents: m,p-Xylene and o-Xylene. If one or more constituents are not detected then half the detection limit is used.

< = constituent not detected above RL. RL is reported.

NaV = not available.

µg/m^3 = micrograms per cubic meter

CRWQCB = California Department of Toxic Substances Control/Regional Water Quality Control Board

E = constituent detected above method quantitation range

EPA = U.S. Environmental Protection Agency

ESL = environmental screening level

J = constituent detected below quantitation limit (RL)

VISL = vapor intrusion screening level

RL = reporting limit

TABLE 3
Detected Constituents in Air
Bell Trading Post Property
Albuquerque, Bernalillo County, New Mexico

Location/Sample ID	Collection Date	Concentration (µg/m^3)										
		1,2-Dibromoethane (EDB)	1,4-Dichlorobenzene	Benzene	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Ethylbenzene	Tetrachloroethylene (PERC)	Trichloroethylene (TCE)	Vinyl acetate
EPA RSL[a] (µg/m3)		**0.05**	**2.55**	**3.60**	**4.68**	**10,429**	**1.22**	**93.9**	**11.2**	**41.7**	**2.09**	**209**
CRWQCB ESL[b] (µg/m^3)		**0.34**	**2.21**	**0.84**	**0.58**	**31,286**	**4.59**	**93.9**	**9.7**	**4.1**	**5.93**	**NaV**
1406074-001A AIR-O-01	6/2/2014	<0.15	<0.12	0.38	0.50	<0.11	<0.097	0.85	0.31	0.31	0.11	<0.070
1406074-002A AIR-I-01	6/2/2014	<0.15	0.12	0.64	0.50	<0.11	0.58	0.91	0.95	0.19	0.21	<0.070
1406074-003A AIR-I-02	6/2/2014	<0.15	<0.12	0.70	0.47	0.20	0.58	1.1	1.3	0.18	0.64	<0.070
1406074-004A AIR-C-01	6/2/2014	<0.15	<0.12	1.2	0.52	<0.11	**1.5**	1.1	6.1	18	3.1	0.23
1406074-005A AIR-C-02	6/2/2014	<0.15	<0.12	0.57	0.54	<0.11	**1.7**	0.91	1.9	0.41	2.5	<0.070

Notes:

Bolding indicates constituent detected in excess of the recommended standard/guidance.

Shaded cells indicate the RL exceeds the standard/guidance.

a =EPA RSL for indoor air. Calculated based on a default residential land use scenario and a total target risk for carcinogens of 10^{-5} (EPA, 2014).

b =Tier 1 CRWQCB ESL for indoor air based on a default residential land use scenario (CRWQCB, 2013). Adjusted for carcinogens to represent a total target cancer risk of 10-5.

< = constituent not detected above RL. RL is reported.

NaV = not available.

µg/m^3 = micrograms per cubic meter

EPA = U.S. Environmental Protection Agency

RSL = regional screening level

RL = reporting limit

Appendix A
Access Agreement

Pamela Homer
Acting Program Manager
Remediation Oversight Section
PO Box 5469
Santa Fe, NM 87502-5469

October 31, 2013

Re: Brownfields Assistance for Bell Trading Post Property
1503 Central Avenue NW, Albuquerque, New Mexico 87104

Dear Pamela,
This is a request for assistance through the NMED Brownfields Program for investigation and assessment of property located at 1503 Central Avenue NW in Albuquerque, New Mexico. Based on previous environmental studies of the property, FHDC is hereby requesting assistance through NMED in conducting further site investigation and assessment activities to address potential indoor air impacts.

Thank you for your consideration of this request.

Respectfully submitted,

Rick Davis
President
Family Housing Development Corporation

FHDC a not-for-profit corporation
po box 91525 albuquerque, nm 87199 phone 505-873-9638 mobile 505-238-2892 fax 505-266-5228 email fhdc@earthlink.net

NEW MEXICO
ENVIRONMENT DEPARTMENT

Ground Water Quality Bureau

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.nmenv.state.nm.us

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

RYAN FLYNN
Secretary-Designate

BUTCH TONGATE
Deputy Secretary

CONSENT FOR ACCESS TO PROPERTY

NAME OF PROPERTY OWNER: Rick Davis

DESCRIPTION OF PROPERTY (type of property & address): Residential Condominiums
1503 Central Avenue NW, Albuquerque, NM 87104

I hereby give my consent and authorization to the New Mexico Environment Department (NMED), its contractor and subcontractors, to enter the property described above in order to conduct environmental assessment activities, which may include:

1. Collecting samples of surface and subsurface soil, soil vapor, ground and surface water, air, building materials, waste materials, and solids or liquids stored or disposed of at the property;

2. Documenting scientific and engineering observations, including but not limited to taking notes, making recordings, taking photographs, measuring and surveying;

3. Drilling and finishing boreholes for the purposes of collecting soil, soil vapor, and/or ground water samples; and

4. Other actions at the property as may be necessary to determine the nature, extent and potential threat to human health and the environment of contaminants at the site.

☒ I am the property owner.

☐ I am a representative of the property owner with authorization to sign this access agreement.

Signature: _____ Date: 10/31/2013

Printed Name: Rick Davis Title: President

Address: PO Box 91525 Albuquerque, NM 87199

Telephone Number(s): Home: _____ Work: 873-9638 Cell: 505-259-0735

Email: rick@rdaviscompanies.com

Appendix B
Site Photo Log

Photo 1: View of the Site's northwest entrance from inside gated parking lot, facing north towards Laguna Blvd and Roma Ave intersection.

Photo 2: Proposed soil gas sampling location SG-02. Location SG-02 was bored approximately 4 ft from the gate on the opposite side, approximately 1 ft from the curb.

Photo 3: Proposed soil gas sampling location SG-03. The presence of telecommunication lines required Location SG-03 to be adjusted slightly to the east (left in picture).

Photo 4: Proposed soil gas sampling location SG-03, just east of telecommunication lines. Location SG-03 was drilled through the sidewalk, approximately 1 ft from the evergreen tree pictured in the center.

Photo 5: Site Building Crawlspace.

Photo 6: Site Building Crawlspace. Note small excavation area around one of the crawlspace piers, exposing unconsolidated material to approximately 1.5 ft deep.

Photo 7: Operational humistat installed to control crawlspace air flow and humidity within the Site Building crawlspace. Typically, humidity levels were set at 45%. Note: System was turned off for the duration execution of air sampling.

Photo 8: Final Soil Vapor Sample Location SG-03.

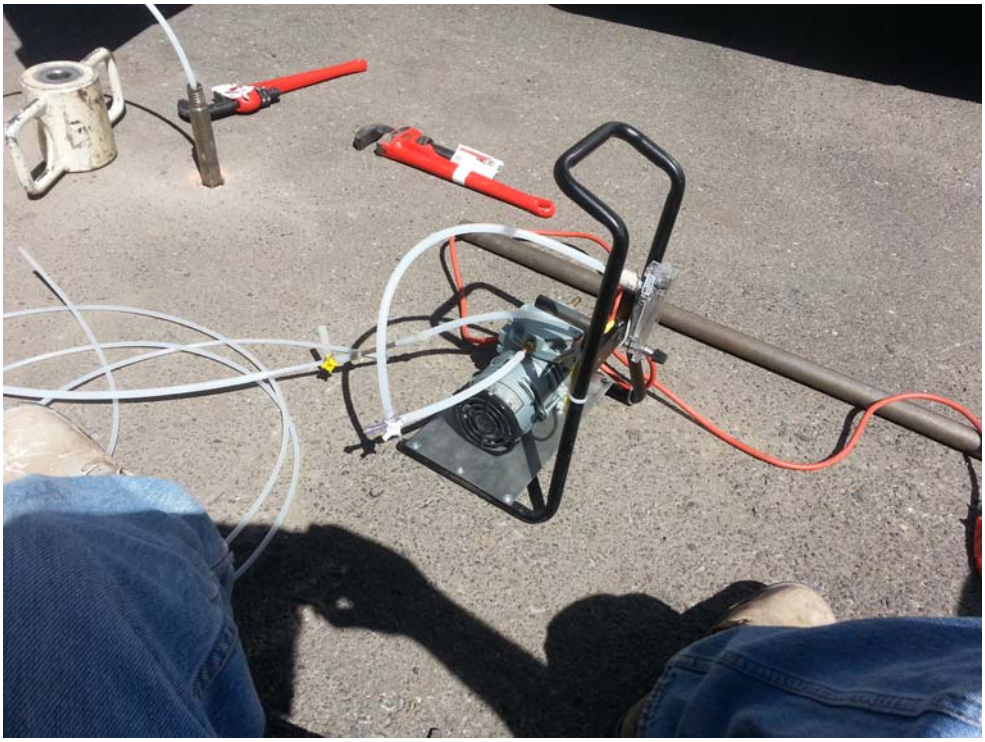


Photo 9: Soil Vapor Sample Equipment.

Photo 10: Soil gas sampling at Location SG-02. Annular space sealed with inflated nitrile gloves to help ensure airtight seal between subsurface and drill pipe was maintained during vapor extraction.

Appendix C
Field Forms and Notes

Vista GeoScience
130 Capital Drive, Suite C
Golden, CO 80401-5654
Phone: 303-277-1694
Fax: 303-278-0104

PAGE:	1 OF 5
DATE / TIME:	6/2/14
PROJECT:	Bell Trading Post
JOB NO. :	
REC / SAMP BY:	C. SHORT

SOIL-VAPOR SAMPLING FORM

WELL/LOC. NO. :	WELL TYPE:	☐ Monitor	☐ Extraction	☐ PRT Sys.	☒ Other
SG-01	WELL MATERIAL:	☐ PVC	☒ Poly / Implant	☐ Teflon	☐ Other

WELL OR PRT PURGING & SAMPLING LOG

PURGE VOLUME
Casing/Tubing Inner Diameter:
☐ 1/4-inch ☐ 1/2-inch ☐ 3/4-inch ☐ 1-inch
☒ Other 3/8"
Total Length of Tubing/Casing: 4'
Number of Well Volumes to be Purged (# Vols): _____

PURGING METHOD
☐ Landtec
☐ Peristaltic pump
☒ Other - Type: PID/CH4
Well Depth: 3'

PURGE VOLUME CALCULATION: (Tubing Volume/ft x length) **X** (# Purge Volumes) = _____ CC or Liters
(Refer to Tubing / Hole Volume Table)

PURGE TIME
1010 START 1012 STOP 2 ELAPSED

PURGE RATE
Initial _____ L/pm Final _____ L/pm

ACTUAL PURGE VOLUME
_____ Liters

FIELD PARAMETER MEASUREMENT CO H2S LEL O2

Time	Minutes	FLOW	Vacuum	PID	FID	~~CH4~~	~~CO2~~	~~O2~~	~~Bal~~		
00:00		L/min		ppm	ppm	%	%	%	%		
1010	0	0.2		2.2		87	0	0	20.4		
1010:30	1/2	↓		1.3		—	—	—	—		
1011	1			1.3		~~87~~	—	—	—		
1011:30	1.5			—		2	0	0	20.2		
1012	2			—		2	0	0	20.2		
~~H2S~~											

Observations/Note:

SAMPLE COLLECTION

SAMPLE CONTAINER TYPE
☐ Tedlar Bag ☒ Sorption Tubes ☐ Summa Canister ☐ Septum Bottle

SAMPLES Sample Series: _____

Sample/Location ID	Contain ID	Date	Time	Depth	Volume	Q	tf	Comments	
249472	SG-01	6/2	1053	3'	1L	0.2	1058		
249471	Trash	6/2	—	—	—	—	—	—	—

Vista GeoScience
130 Capital Drive, Suite C
Golden, CO 80401-5654
Phone: 303-277-1694
Fax: 303-278-0104

PAGE:	2 OF 5
DATE / TIME:	6/2/14
PROJECT:	
JOB NO. :	
REC / SAMP BY:	C. SIBERT

SOIL-VAPOR SAMPLING FORM

WELL/LOC. NO. :	WELL TYPE:	☐ Monitor	☐ Extraction	☐ PRT Sys.	☒ Other
SG-02	WELL MATERIAL:	☐ PVC	☒ Poly / Implant	☐ Teflon	☐ Other

WELL OR PRT PURGING & SAMPLING LOG

PURGE VOLUME
Casing/Tubing Inner Diameter:
☒ 1/4-inch ☐ 1/2-inch ☐ 3/4-inch ☐ 1-inch
☐ Other _____
Total Length of Tubing/Casing: 4'
Number of Well Volumes to be Purged (# Vols): _____

PURGING METHOD
☐ Landtec
☐ Peristaltic pump
☒ Other - Type: PID/GGI
Well Depth: 30"

PURGE VOLUME CALCULATION: (Tubing Volume/ft x length) **X** (# Purge Volumes) = _____ CC or Liters
(Refer to Tubing / Hole Volume Table)

PURGE TIME _____ START _____ STOP _____ ELAPSED
PURGE RATE Initial _____ L/pm Final _____ L/pm
ACTUAL PURGE VOLUME _____ Liters

FIELD PARAMETER MEASUREMENT CO H_2S LEL O_2

Time	Minutes	FLOW	Vacuum	PID	FID	~~CH4~~	~~CO2~~	~~O2~~	~~Bal~~		
00:00		L/min		ppm	ppm	%	%	%	%		
1132	0	0.2		3.2		—	—	—	—		
1133	1			1.1		—	—	—	—		
1134	2			0.8		—	—	—	—		
1135	3			0.6		4	1	0	19.8		
1136	4			—		0	2	3	19.8		
1137	5			—		7	2	3	19.8		

Observations/Note:

SAMPLE COLLECTION

SAMPLE CONTAINER TYPE
☐ Tedlar Bag ☒ Sorption Tubes ☐ Summa Canister ☐ Septum Bottle

SAMPLES Sample Series: _____

Sample/Location ID		Contain ID	Date	Time	Depth	Volume	Q	tE	Comments
24941	79	SG-02	6/2	1140	30"	1L	0.2	1145	DUPE
24941	80	SG-02	6/2	1147	30"	1L	0.2	1147	Use this one

Vista GeoScience
130 Capital Drive, Suite C
Golden, CO 80401-5654
Phone: 303-277-1694
Fax: 303-278-0104

PAGE:	3 OF 5
DATE / TIME:	~~6/11~~ 6/12/14
PROJECT:	
JOB NO. :	
REC / SAMP BY:	C. SHORT

SOIL-VAPOR SAMPLING FORM

WELL/LOC. NO. :	WELL TYPE:	☐ Monitor	☐ Extraction	☐ PRT Sys.	☒ Other
SG-03	WELL MATERIAL:	☐ PVC	☒ Poly / Implant	☐ Teflon	☐ Other

WELL OR PRT PURGING & SAMPLING LOG

PURGE VOLUME
Casing/Tubing Inner Diameter:
☒ 1/4-inch ☐ 1/2-inch ☐ 3/4-inch ☐ 1-inch
☐ Other _____
Total Length of Tubing/Casing: 4'
Number of Well Volumes to be Purged (# Vols): _____

PURGING METHOD
☐ Landtec
☐ Peristaltic pump
☒ Other - Type: PID/EGI
Well Depth: 3'

PURGE VOLUME CALCULATION: (Tubing Volume/ft x length) **X** (# Purge Volumes) = _____ CC or Liters
(Refer to Tubing / Hole Volume Table)

PURGE TIME
1235 START 1238 STOP _____ ELAPSED

PURGE RATE
Initial _____ L/pm Final _____ L/pm

ACTUAL PURGE VOLUME
_____ Liters

FIELD PARAMETER MEASUREMENT

Time	Minutes	FLOW	Vacuum	PID	FID	~~CH4~~ CO	~~CO2~~ H_2S	~~O2~~ LEL	~~Bal~~ O_2		
00:00		L/min		ppm	ppm	%	%	%	%		
1235	0	0.2		1.0		—	—	—	—		
1236	1	↓		0		—	—	—	—		
1237	2	↓		0		4	2	0	20.3		
1238	3	↓		—		3	1	0	20.2		

Observations/Note:

SAMPLE COLLECTION

SAMPLE CONTAINER TYPE
☐ Tedlar Bag ☒ Sorption Tubes ☐ Summa Canister ☐ Septum Bottle

SAMPLES Sample Series: L/min

Sample/Location ID	Contain ID	Date	Time	Depth	Volume	Q	t_F	Comments	
249473	SG-03	6/12	1241	3'	1 L	0.2	1246		
247805	SG-03	6/12	1249	3'	1 L	0.2	1249		

Vista GeoScience
130 Capital Drive, Suite C
Golden, CO 80401-5654
Phone: 303-277-1694
Fax: 303-278-0104

PAGE:	4 OF 5
DATE / TIME:	6/2/14
PROJECT:	
JOB NO. :	
REC / SAMP BY:	ASHORT

SOIL-VAPOR SAMPLING FORM

WELL/LOC. NO. :	WELL TYPE:	☐ Monitor	☐ Extraction	☐ PRT Sys.	☒ Other
SG-04	WELL MATERIAL:	☐ PVC	☒ Poly / Implant	☐ Teflon	☐ Other

WELL OR PRT PURGING & SAMPLING LOG

PURGE VOLUME
Casing/Tubing Inner Diameter:
☒ 1/4-inch ☐ 1/2-inch ☐ 3/4-inch ☐ 1-inch
☐ Other _____
Total Length of Tubing/Casing: _____
Number of Well Volumes to be Purged (# Vols): _____

PURGING METHOD
☐ Landtec
☐ Peristaltic pump
☒ Other - Type: PID/GEM
Well Depth: _____

PURGE VOLUME CALCULATION: (Tubing Volume/ft x length) **X** (# Purge Volumes) = _____ CC or Liters
(Refer to Tubing / Hole Volume Table)

PURGE TIME
_____ START _____ STOP _____ ELAPSED

PURGE RATE
Initial 0.2 L/pm Final 0.2 L/pm

ACTUAL PURGE VOLUME
_____ Liters

FIELD PARAMETER MEASUREMENT CO H_2S LEL O_2

Time	Minutes	FLOW	Vacuum	PID	FID	~~CH4~~	~~CO2~~	O2	~~Bal~~		
00:00		L/min		ppm	ppm	%	%	%	%		
1437	0	0.2		0.1		0	0	0	20.9		
1439	2			0.1		0	0	0	20.9		

Observations/Note:

SAMPLE COLLECTION

SAMPLE CONTAINER TYPE
☐ Tedlar Bag ☒ Sorption Tubes ☐ Summa Canister ☐ Septum Bottle

SAMPLES Sample Series: _____

Sample/Location ID		Contain ID		Date	Time	Depth	Volume	Q	tf	Comments	
249	477	SG-04		6/2/14	1443	2.5'	1L	0.2	1448		
249	478	SG-04		6/2/14	1450	2.5'	1L	0.2	1455		

Vista GeoScience
130 Capital Drive, Suite C
Golden, CO 80401-5654
Phone: 303-277-1694
Fax: 303-278-0104

PAGE:	5 OF 5
DATE / TIME:	6/2/14
PROJECT:	
JOB NO. :	
REC / SAMP BY:	C SHORT

SOIL-VAPOR SAMPLING FORM

WELL/LOC. NO.:	WELL TYPE:	☐ Monitor	☐ Extraction	☐ PRT Sys.	☒ Other
SG-05	WELL MATERIAL:	☐ PVC	☒ Poly / Implant	☐ Teflon	☐ Other

WELL OR PRT PURGING & SAMPLING LOG

PURGE VOLUME
Casing/Tubing Inner Diameter:
☒ 1/4-inch ☐ 1/2-inch ☐ 3/4-inch ☐ 1-inch
☐ Other _____
Total Length of Tubing/Casing: 3'
Number of Well Volumes to be Purged (# Vols): _____

PURGING METHOD
☐ Landtec
☐ Peristaltic pump
☐ Other - Type: FIDAGI (CHS, 6/4/14)
Well Depth: 2.5'

PURGE VOLUME CALCULATION: (Tubing Volume/ft x length) **X** (# Purge Volumes) = _____ CC or Liters
(Refer to Tubing / Hole Volume Table)

PURGE TIME
_____ START _____ STOP _____ ELAPSED

PURGE RATE
Initial 0.2 L/pm Final 0.2 L/pm

ACTUAL PURGE VOLUME
_____ Liters

FIELD PARAMETER MEASUREMENT CO H2S LEL O2

Time	Minutes	FLOW	Vacuum	PID	PID	CH4	CO2	O2	Bal		
00:00		L/min		ppm	ppm	%	%	%	%		
1404				0.2		—	—	—	—		
1408				0.1		—	—	—	—		
1410				—		0	0	0	20.9		
1411				—		0	0	0	20.9		

Observations/Note:

SAMPLE COLLECTION

SAMPLE CONTAINER TYPE
☐ Tedlar Bag ☐ Sorption Tubes ☐ Summa Canister ☐ Septum Bottle

SAMPLES Sample Series: _____

Sample/Location ID	Contain ID		Date	Time	Depth	Volume	Q4	tF	Comments	
247809	SG-	05	6/2/14	1414	2.5'	1L	0.2	1419		
249476	SG-	05	6/2/14	1421	2.5'	1L	0.2	1426		

5/28/14 CHS Bell Trading Post (19)

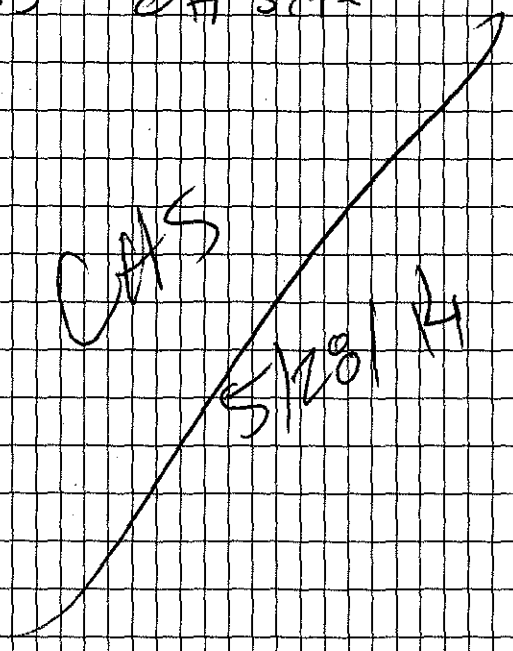
0805 on site.
obj: measure crawlspace ht,
Confirm utils marked
Mark drill locs
Find pwr in crawlspace

0810 Telecoms (orange), blue, green marked on road + sidewalk on Roma/Laguna

0825 Gas locator on site + gas marked w/ yellow dots in driveway area. Runs from meters on wall towards motorcycle parking.

0835 Met Dallas - confirmed locations. Crawlspace ht, shouldn't be an issue + >6' in places

0855 offsite



(20) Bell Trading Post CHS 6/2/14

0740 C. Short on site. No one in office.
0750 Gained access to driveway through Darcy @ Tanager. Prepare to set air samplers.
6L summas w/ 8 hr regulators.
0758 Set Air-O-01. Regulator #133, tank #925lm. P_i = 24" Hg.
0800 Precision concrete on site
0814 Begin coring.
0819 set sampler @ Door 101. @14" Hg Air-I-01
0822 Set sampler @ Door 113 @9" Hg Air-I-02
0850 Dehumidifier turned off in crawlspace.
0855 Set Air-C-01, ~~west~~ eastern sample, 25" Hg
0900 set Air-C-02, western sample, 25" Hg
0902 Precision crew done, 3 holes, 1.5" diam, 24" deep. Called Lee @ 0840, will prepare to drive at

Bell Trading Post CHS 6/2/14 @

1010 Preparing to sample at SG-01

	0'	30'	60'
PID =	2.2	1.3	1.3
CO =	87 ppm	2	2
H_2S =	0	0	0
LEL =	0	0	0
O =	20.4%	20.2	20.2

3' hole stabilizes quickly (430 s), 1 set of parameters taken

Samples:		Time	Q	Vol	ID
	249472	1037	3'	1L	SG-01
	249471	Bad sample. Do NOT Run			

1025 Sampling apparatus jumping
From 200 → 500 mL/min.
Put Bypass valve between pump & rotameter to ease pressure.
Can now confidently gauge 200 mL/min.

1033 Sample SG-01. Q = 0.2 ~~L~~ L/min

~~All samples taken w/ 3/8" tubing, 5' for outdoor samples 3' for indoor.~~
See Field Forms for Dimensions

CHS
6/2/14

CHS
6/2/14

Bell Trading Post CHS 6/2/14

1126 Preparing to sample at SG-02 (Near entrance Gate.)

	samples:	t_i	d	Vol	Q	ID	t_f
Dup	249479	1140	30"	1L	0.2 L/m	SG-02	1145
use	249480	1147	30"	1L	0.2 L/m	SG-02	1152

1132 Begin purge. 1/4" tube.

t	PID	CO	H_2S	LEL	O_2
1132	3.2	–	–	–	–
1133	1.1	–	–	–	–
1134	0.8	–	–	–	–
1135	0.6	4	1	0	19.8
1136	±	8	2	3	19.8
1137	–	7	2	3	19.9

1140 Begin sampling. Dupe.

1147 Begin Sampling 249480

CHS

6/2/14

Bell Trading Post CHS 6/2/14 ES RT

1234 Preparing to sample SG-03

~~Sample~~ C/S

1235 Begin purge 1/4" tube

t	PID	CO	H2S	LEL	O2
1235	1.0	-	-	-	-
1236	0	-	-	-	-
1237	0	-	-	-	-
1237	-	41	2	0	20.3
1238	-	3	1	0	20.2

Samples	t:	D	NO	Q	ID	tf
2494773	1241	3'	14	0.2	SG-03	1246
2478803	1249	3'	14	0.2	SG-03	1254

C/S

ES

14

(24) Bell Trading Post 6/2/14 CHS

1400: Prepare to sample @ SG-05.

Time	PID	CO	~~LEL~~ H_2S	LEL	O_2
1404	0.2	-	-	-	-
1408	0.1	-	-	-	-
1410	-	0	0	0	20.9
1411	-	0	0	0	20.9

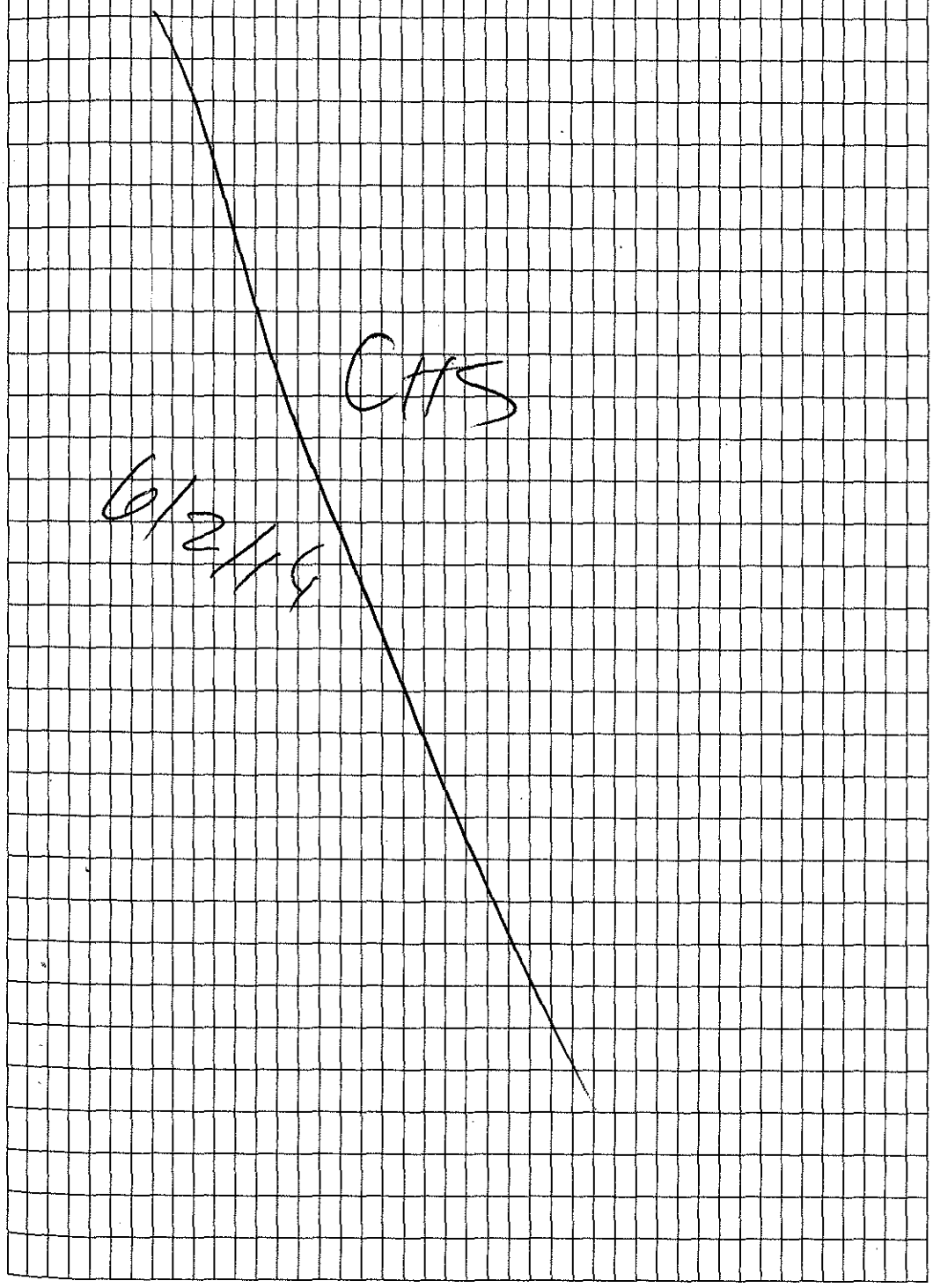
1415: Begin purge ('/4" Tube)
Sampling continued on field forms.
1430 Pam (NMED) on site
1300 Pam & Joe T offsite.

1443 Sampled SG-04, 249477
1450 Sampled SG-04, 249478
1414 Sampled SG-05, 247809
1421 Sampled. SG-05, 249476

1601 Retrieved Air-0-01. 1" Hg
1621 Retrieved Air-I-01 1" Hg
1623 Retrieved Air-I-02 9" Hg.
1700 Retrieved Air-C-01
1702 Retrieved Air-C-02
1710 Handed off samples to Michael From Hall on site.
1715 Looked at asphalt patches w/ Dallas. Asked me to mound them 1/4" above pavement.
1745 offsite

Bell Trading Post 6/12/14 CHS (25)

1800 Packaged samples, sent to FedEx



Appendix D
Laboratory Analytical Reports

Friday, June 13, 2014

Joe Tracy
Intera
6000 Uptown Blvd. NE, Suite 220
Albuquerque, NM 87110

RE: 14166: Bell Trading Post

Order No.: 1406001

Dear Joe:

Vista GeoScience received 6 Soil Vapor Samples, collected on Sorbent Tubes on 6/3/2014 for 8260 analysis presented in the following report.

The following report contains data, associated QC and laboratory specifications; exceptions are noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Roger Bain
Senior Chemist

130 Capital Drive, Suite C
Golden, Colorado 80401-5654
Web Site: www.VistaGeoScience.com

Vista GeoScience

PH: 303.277.1694
FAX: 303.278.0104
E-Mail: info@VistaGeoScience.com

CLIENT: Intera
Project: 14166.01: Bell Trading Post
Lab Order: 1406001

CASE NARRATIVE

Samples were received on 6/3/14 from Intera and were accompanied by a chain of custody form. The samples and their containers appeared to be in good condition and the chain of custody form was complete and accurate.

Samples were analyzed using the methods outlined in the following references: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition and Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, Compendium Method TO-17 (EPA/625/R-96/010b).

Calibration - The laboratory instruments are calibrated using method appropriate standards. On each day project samples are analyzed the instrument calibration is verified using a mid level Continuing Calibration Verification (CCV). Calculations are carried out by the data system to compute the actual concentration of analyte in the original sample.

Method Blanks, Trip Blanks and Instrument Blanks - Blanks are analyzed after each initial calibration, continuing calibration verification, and after samples determined to have high concentrations of analytes to verify system cleanliness. Method blanks are analyzed to verify the cleanliness of procedures requiring sample preparation prior to analysis. Trip blanks are prepared by the laboratory and accompany the samples to verify that there was no contamination during transport.

Batch QC - Prior to analysis, the project samples are associated with a QC batch. This batch is then prepared and analyzed along with QC samples prepared at the same time and using the same reagents and standards. The QC samples associated with a sample batch may include Method Blanks (MB). The results of the batch QC samples are included in the QC section of the report.

Analyst Comments:
Sample SG-3DUP did not duplicate. Two analytes are reported above linear range in sample SG-2 and are flagged with an "E".

Roger Bain
Senior Chemist

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-01
Lab Order: 1406001
Tag Number: 249472
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-001A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	1.7	5.0	J	ng/L	1	6/12/2014
Chloromethane	ND	5.0		ng/L	1	6/12/2014
Vinyl chloride	ND	5.0		ng/L	1	6/12/2014
Bromomethane	ND	5.0		ng/L	1	6/12/2014
Chloroethane	ND	5.0		ng/L	1	6/12/2014
Trichlorofluoromethane	4.5	5.0	J	ng/L	1	6/12/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Freon-113	ND	5.0		ng/L	1	6/12/2014
Acetone	170	5.0		ng/L	1	6/12/2014
Iodomethane	ND	5.0		ng/L	1	6/12/2014
Carbon disulfide	25	5.0		ng/L	1	6/12/2014
Methylene chloride	ND	5.0		ng/L	1	6/12/2014
Acrylonitrile	ND	5.0		ng/L	1	6/12/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/12/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Vinyl acetate	ND	5.0		ng/L	1	6/12/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
2-Butanone	21	5.0		ng/L	1	6/12/2014
cis-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Bromochloromethane	ND	5.0		ng/L	1	6/12/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/12/2014
Chloroform	ND	5.0		ng/L	1	6/12/2014
1,1,1-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/12/2014
Benzene	14	5.0		ng/L	1	6/12/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Trichloroethene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
Dibromomethane	ND	5.0		ng/L	1	6/12/2014
Bromodichloromethane	ND	5.0		ng/L	1	6/12/2014
4-Methyl-2-pentanone	19	5.0		ng/L	1	6/12/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/12/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Toluene	140	5.0		ng/L	1	6/12/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
Tetrachloroethene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT:	Intera	**Client Sample ID:**	SG-01
Lab Order:	1406001	**Tag Number:**	249472
Project:	14166.01: Bell Trading Post	**Collection Date:**	6/2/2014
Lab ID:	1406001-001A **Date Received:** 6/3/2014	**Matrix:**	SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	ND	5.0		ng/L	1	6/12/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/12/2014
Chlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Ethylbenzene	51	5.0		ng/L	1	6/12/2014
m,p-Xylene	140	10		ng/L	1	6/12/2014
o-Xylene	38	5.0		ng/L	1	6/12/2014
Styrene	ND	5.0		ng/L	1	6/12/2014
Bromoform	ND	5.0		ng/L	1	6/12/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/12/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Bromobenzene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/12/2014
n-Propylbenzene	10	5.0		ng/L	1	6/12/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
1,3,5-Trimethylbenzene	10	5.0		ng/L	1	6/12/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
tert-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trimethylbenzene	34	5.0		ng/L	1	6/12/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
4-Isopropyltoluene	ND	5.0		ng/L	1	6/12/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/12/2014
Naphthalene	4.1	5.0	J	ng/L	1	6/12/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Vista GeoScience

Date: *13-Jun-14*

CLIENT:	Intera	**Client Sample ID:**	SG-02
Lab Order:	1406001	**Tag Number:**	249479
Project:	14166.01: Bell Trading Post	**Collection Date:**	6/2/2014
Lab ID:	1406001-002A **Date Received:** 6/3/2014	**Matrix:**	SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	ND	5.0		ng/L	1	6/12/2014
Chloromethane	ND	5.0		ng/L	1	6/12/2014
Vinyl chloride	ND	5.0		ng/L	1	6/12/2014
Bromomethane	ND	5.0		ng/L	1	6/12/2014
Chloroethane	ND	5.0		ng/L	1	6/12/2014
Trichlorofluoromethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Freon-113	ND	5.0		ng/L	1	6/12/2014
Acetone	400	5.0	E	ng/L	1	6/12/2014
Iodomethane	ND	5.0		ng/L	1	6/12/2014
Carbon disulfide	8.7	5.0		ng/L	1	6/12/2014
Methylene chloride	ND	5.0		ng/L	1	6/12/2014
Acrylonitrile	ND	5.0		ng/L	1	6/12/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/12/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Vinyl acetate	ND	5.0		ng/L	1	6/12/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
2-Butanone	70	5.0		ng/L	1	6/12/2014
cis-1,2-Dichloroethene	1.9	5.0	J	ng/L	1	6/12/2014
Bromochloromethane	ND	5.0		ng/L	1	6/12/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/12/2014
Chloroform	7.7	5.0		ng/L	1	6/12/2014
1,1,1-Trichloroethane	1.6	5.0	J	ng/L	1	6/12/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/12/2014
Benzene	11	5.0		ng/L	1	6/12/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Trichloroethene	1800	5.0	E	ng/L	1	6/12/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
Dibromomethane	ND	5.0		ng/L	1	6/12/2014
Bromodichloromethane	ND	5.0		ng/L	1	6/12/2014
4-Methyl-2-pentanone	20	5.0		ng/L	1	6/12/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/12/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Toluene	67	5.0		ng/L	1	6/12/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
Tetrachloroethene	12	5.0		ng/L	1	6/12/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-02
Lab Order: 1406001
Tag Number: 249479
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-002A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	20	5.0		ng/L	1	6/12/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/12/2014
Chlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Ethylbenzene	41	5.0		ng/L	1	6/12/2014
m,p-Xylene	200	10		ng/L	1	6/12/2014
o-Xylene	82	5.0		ng/L	1	6/12/2014
Styrene	ND	5.0		ng/L	1	6/12/2014
Bromoform	ND	5.0		ng/L	1	6/12/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/12/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Bromobenzene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/12/2014
n-Propylbenzene	2.6	5.0	J	ng/L	1	6/12/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
1,3,5-Trimethylbenzene	3.5	5.0	J	ng/L	1	6/12/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
tert-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trimethylbenzene	19	5.0		ng/L	1	6/12/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichlorobenzene	4.3	5.0	J	ng/L	1	6/12/2014
4-Isopropyltoluene	ND	5.0		ng/L	1	6/12/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/12/2014
Naphthalene	8.7	5.0		ng/L	1	6/12/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT:	Intera	**Client Sample ID:**	SG-03
Lab Order:	1406001	**Tag Number:**	249473
Project:	14166.01: Bell Trading Post	**Collection Date:**	6/2/2014
Lab ID:	1406001-003A **Date Received:** 6/3/2014	**Matrix:**	SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	2.3	5.0	J	ng/L	1	6/12/2014
Chloromethane	ND	5.0		ng/L	1	6/12/2014
Vinyl chloride	ND	5.0		ng/L	1	6/12/2014
Bromomethane	ND	5.0		ng/L	1	6/12/2014
Chloroethane	ND	5.0		ng/L	1	6/12/2014
Trichlorofluoromethane	4.1	5.0	J	ng/L	1	6/12/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Freon-113	ND	5.0		ng/L	1	6/12/2014
Acetone	85	5.0		ng/L	1	6/12/2014
Iodomethane	ND	5.0		ng/L	1	6/12/2014
Carbon disulfide	4.8	5.0	J	ng/L	1	6/12/2014
Methylene chloride	ND	5.0		ng/L	1	6/12/2014
Acrylonitrile	ND	5.0		ng/L	1	6/12/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/12/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Vinyl acetate	ND	5.0		ng/L	1	6/12/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
2-Butanone	ND	5.0		ng/L	1	6/12/2014
cis-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Bromochloromethane	ND	5.0		ng/L	1	6/12/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/12/2014
Chloroform	29	5.0		ng/L	1	6/12/2014
1,1,1-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/12/2014
Benzene	7.7	5.0		ng/L	1	6/12/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Trichloroethene	11	5.0		ng/L	1	6/12/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
Dibromomethane	ND	5.0		ng/L	1	6/12/2014
Bromodichloromethane	5.4	5.0		ng/L	1	6/12/2014
4-Methyl-2-pentanone	9.2	5.0		ng/L	1	6/12/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/12/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Toluene	28	5.0		ng/L	1	6/12/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
Tetrachloroethene	1.5	5.0	J	ng/L	1	6/12/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-03
Lab Order: 1406001
Tag Number: 249473
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-003A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	ND	5.0		ng/L	1	6/12/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/12/2014
Chlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Ethylbenzene	12	5.0		ng/L	1	6/12/2014
m,p-Xylene	39	10		ng/L	1	6/12/2014
o-Xylene	15	5.0		ng/L	1	6/12/2014
Styrene	2.7	5.0	J	ng/L	1	6/12/2014
Bromoform	ND	5.0		ng/L	1	6/12/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/12/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Bromobenzene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/12/2014
n-Propylbenzene	2.1	5.0	J	ng/L	1	6/12/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
1,3,5-Trimethylbenzene	7.3	5.0		ng/L	1	6/12/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
tert-Butylbenzene	1.6	5.0	J	ng/L	1	6/12/2014
1,2,4-Trimethylbenzene	14	5.0		ng/L	1	6/12/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichlorobenzene	5.8	5.0		ng/L	1	6/12/2014
4-Isopropyltoluene	33	5.0		ng/L	1	6/12/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/12/2014
Naphthalene	5.4	5.0		ng/L	1	6/12/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-04
Lab Order: 1406001
Tag Number: 249477
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-004A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	2.5	5.0	J	ng/L	1	6/12/2014
Chloromethane	ND	5.0		ng/L	1	6/12/2014
Vinyl chloride	ND	5.0		ng/L	1	6/12/2014
Bromomethane	ND	5.0		ng/L	1	6/12/2014
Chloroethane	ND	5.0		ng/L	1	6/12/2014
Trichlorofluoromethane	3.0	5.0	J	ng/L	1	6/12/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Freon-113	ND	5.0		ng/L	1	6/12/2014
Acetone	57	5.0		ng/L	1	6/12/2014
Iodomethane	ND	5.0		ng/L	1	6/12/2014
Carbon disulfide	12	5.0		ng/L	1	6/12/2014
Methylene chloride	ND	5.0		ng/L	1	6/12/2014
Acrylonitrile	ND	5.0		ng/L	1	6/12/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/12/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Vinyl acetate	ND	5.0		ng/L	1	6/12/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
2-Butanone	ND	5.0		ng/L	1	6/12/2014
cis-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Bromochloromethane	ND	5.0		ng/L	1	6/12/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/12/2014
Chloroform	ND	5.0		ng/L	1	6/12/2014
1,1,1-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/12/2014
Benzene	3.9	5.0	J	ng/L	1	6/12/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Trichloroethene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
Dibromomethane	ND	5.0		ng/L	1	6/12/2014
Bromodichloromethane	ND	5.0		ng/L	1	6/12/2014
4-Methyl-2-pentanone	ND	5.0		ng/L	1	6/12/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/12/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Toluene	51	5.0		ng/L	1	6/12/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
Tetrachloroethene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-04
Lab Order: 1406001
Tag Number: 249477
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-004A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	ND	5.0		ng/L	1	6/12/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/12/2014
Chlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Ethylbenzene	ND	5.0		ng/L	1	6/12/2014
m,p-Xylene	ND	10		ng/L	1	6/12/2014
o-Xylene	ND	5.0		ng/L	1	6/12/2014
Styrene	ND	5.0		ng/L	1	6/12/2014
Bromoform	ND	5.0		ng/L	1	6/12/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/12/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Bromobenzene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/12/2014
n-Propylbenzene	ND	5.0		ng/L	1	6/12/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
1,3,5-Trimethylbenzene	ND	5.0		ng/L	1	6/12/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
tert-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trimethylbenzene	ND	5.0		ng/L	1	6/12/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichlorobenzene	1.9	5.0	J	ng/L	1	6/12/2014
4-Isopropyltoluene	ND	5.0		ng/L	1	6/12/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/12/2014
Naphthalene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-05
Lab Order: 1406001
Tag Number: 247809
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-005A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	3.3	5.0	J	ng/L	1	6/12/2014
Chloromethane	ND	5.0		ng/L	1	6/12/2014
Vinyl chloride	ND	5.0		ng/L	1	6/12/2014
Bromomethane	ND	5.0		ng/L	1	6/12/2014
Chloroethane	ND	5.0		ng/L	1	6/12/2014
Trichlorofluoromethane	4.7	5.0	J	ng/L	1	6/12/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Freon-113	ND	5.0		ng/L	1	6/12/2014
Acetone	73	5.0		ng/L	1	6/12/2014
Iodomethane	ND	5.0		ng/L	1	6/12/2014
Carbon disulfide	3.4	5.0	J	ng/L	1	6/12/2014
Methylene chloride	ND	5.0		ng/L	1	6/12/2014
Acrylonitrile	ND	5.0		ng/L	1	6/12/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/12/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Vinyl acetate	ND	5.0		ng/L	1	6/12/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
2-Butanone	ND	5.0		ng/L	1	6/12/2014
cis-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Bromochloromethane	ND	5.0		ng/L	1	6/12/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/12/2014
Chloroform	ND	5.0		ng/L	1	6/12/2014
1,1,1-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/12/2014
Benzene	4.0	5.0	J	ng/L	1	6/12/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Trichloroethene	14	5.0		ng/L	1	6/12/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
Dibromomethane	ND	5.0		ng/L	1	6/12/2014
Bromodichloromethane	ND	5.0		ng/L	1	6/12/2014
4-Methyl-2-pentanone	ND	5.0		ng/L	1	6/12/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/12/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Toluene	11	5.0		ng/L	1	6/12/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
Tetrachloroethene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-05
Lab Order: 1406001
Tag Number: 247809
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-005A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	ND	5.0		ng/L	1	6/12/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/12/2014
Chlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Ethylbenzene	2.7	5.0	J	ng/L	1	6/12/2014
m,p-Xylene	6.6	10	J	ng/L	1	6/12/2014
o-Xylene	2.1	5.0	J	ng/L	1	6/12/2014
Styrene	1.3	5.0	J	ng/L	1	6/12/2014
Bromoform	ND	5.0		ng/L	1	6/12/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/12/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Bromobenzene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/12/2014
n-Propylbenzene	ND	5.0		ng/L	1	6/12/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
1,3,5-Trimethylbenzene	ND	5.0		ng/L	1	6/12/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
tert-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trimethylbenzene	5.0	5.0	J	ng/L	1	6/12/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichlorobenzene	3.4	5.0	J	ng/L	1	6/12/2014
4-Isopropyltoluene	ND	5.0		ng/L	1	6/12/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/12/2014
Naphthalene	3.5	5.0	J	ng/L	1	6/12/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT:	Intera	**Client Sample ID:**	SG-03DUP
Lab Order:	1406001	**Tag Number:**	247803
Project:	14166.01: Bell Trading Post	**Collection Date:**	6/2/2014
Lab ID:	1406001-006A **Date Received:** 6/3/2014	**Matrix:**	SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	ND	5.0		ng/L	1	6/12/2014
Chloromethane	ND	5.0		ng/L	1	6/12/2014
Vinyl chloride	ND	5.0		ng/L	1	6/12/2014
Bromomethane	ND	5.0		ng/L	1	6/12/2014
Chloroethane	ND	5.0		ng/L	1	6/12/2014
Trichlorofluoromethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Freon-113	ND	5.0		ng/L	1	6/12/2014
Acetone	ND	5.0		ng/L	1	6/12/2014
Iodomethane	ND	5.0		ng/L	1	6/12/2014
Carbon disulfide	ND	5.0		ng/L	1	6/12/2014
Methylene chloride	ND	5.0		ng/L	1	6/12/2014
Acrylonitrile	ND	5.0		ng/L	1	6/12/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/12/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Vinyl acetate	ND	5.0		ng/L	1	6/12/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
2-Butanone	ND	5.0		ng/L	1	6/12/2014
cis-1,2-Dichloroethene	ND	5.0		ng/L	1	6/12/2014
Bromochloromethane	ND	5.0		ng/L	1	6/12/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/12/2014
Chloroform	ND	5.0		ng/L	1	6/12/2014
1,1,1-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/12/2014
Benzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/12/2014
Trichloroethene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/12/2014
Dibromomethane	ND	5.0		ng/L	1	6/12/2014
Bromodichloromethane	ND	5.0		ng/L	1	6/12/2014
4-Methyl-2-pentanone	ND	5.0		ng/L	1	6/12/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/12/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
Toluene	ND	5.0		ng/L	1	6/12/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/12/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/12/2014
Tetrachloroethene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Client Sample ID: SG-03DUP
Lab Order: 1406001
Tag Number: 247803
Project: 14166.01: Bell Trading Post
Collection Date: 6/2/2014
Lab ID: 1406001-006A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	ND	5.0		ng/L	1	6/12/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/12/2014
Chlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Ethylbenzene	ND	5.0		ng/L	1	6/12/2014
m,p-Xylene	ND	10		ng/L	1	6/12/2014
o-Xylene	ND	5.0		ng/L	1	6/12/2014
Styrene	ND	5.0		ng/L	1	6/12/2014
Bromoform	ND	5.0		ng/L	1	6/12/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/12/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/12/2014
Bromobenzene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/12/2014
n-Propylbenzene	ND	5.0		ng/L	1	6/12/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
1,3,5-Trimethylbenzene	ND	5.0		ng/L	1	6/12/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/12/2014
tert-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trimethylbenzene	ND	5.0		ng/L	1	6/12/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,3-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
4-Isopropyltoluene	ND	5.0		ng/L	1	6/12/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/12/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/12/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/12/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/12/2014
Naphthalene	ND	5.0		ng/L	1	6/12/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/12/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

24-Jun-14

Lab Order: 1406001

Client: Intera

Project: 14166.01: Bell Trading Post

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1406001-001A	SG-01	6/2/2014	Soil Gas	Volatile Organics in Soil Gas			6/12/2014
1406001-002A	SG-02			Volatile Organics in Soil Gas			6/12/2014
1406001-003A	SG-03			Volatile Organics in Soil Gas			6/12/2014
1406001-004A	SG-04			Volatile Organics in Soil Gas			6/12/2014
1406001-005A	SG-05			Volatile Organics in Soil Gas			6/12/2014
1406001-006A	SG-03DUP			Volatile Organics in Soil Gas			6/12/2014
1406001-007A	SG-02DUP			Volatile Organics in Soil Gas			6/13/2014

Vista GeoScience

Date: *13-Jun-14*

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MB** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1665**
Client ID: **ZZZZZ** Batch ID: **R1665** TestNo: **SW8260B** Analysis **6/12/2014** SeqNo: **17667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
Freon-113	ND	5.0									
Acetone	ND	5.0									
Iodomethane	ND	5.0									
Carbon disulfide	ND	5.0									
Methylene chloride	ND	5.0									
Acrylonitrile	ND	5.0									
Methyl tert-butyl ether	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
1,1-Dichloroethane	ND	5.0									
Vinyl acetate	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Butanone	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
Bromochloromethane	ND	5.0									
Tetrahydrofuran	ND	5.0									
Chloroform	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1-Dichloropropene	ND	5.0									
Carbon tetrachloride	ND	5.0									
Benzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
Trichloroethene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MB** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1665**
Client ID: **ZZZZZ** Batch ID: **R1665** TestNo: **SW8260B** Analysis **6/12/2014** SeqNo: **17667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	5.0									
Dibromomethane	ND	5.0									
Bromodichloromethane	ND	5.0									
4-Methyl-2-pentanone	ND	5.0									
2-Chloroethyl vinyl ether	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Toluene	ND	5.0									
trans-1,3-Dichloropropene	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
Tetrachloroethene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
Chlorobenzene	ND	5.0									
1,1,1,2-Tetrachloroethane	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	10									
o-Xylene	ND	5.0									
Styrene	ND	5.0									
Bromoform	ND	5.0									
Isopropylbenzene	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
Bromobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
n-Propylbenzene	ND	5.0									
2-Chlorotoluene	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
4-Chlorotoluene	ND	5.0									
tert-Butylbenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MB** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1665**
Client ID: **ZZZZZ** Batch ID: **R1665** TestNo: **SW8260B** Analysis **6/12/2014** SeqNo: **17667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
n-Butylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Naphthalene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Chain-of-Custody Record

Client: Intera

Mailing Address: on File

Phone #: 505 246 1600

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☒ EDD (Type) EXCEL

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Bell Trading Post

Project #:

Project Manager: Joe Tracy

Sampler: C Short

On Ice: ☐ Yes ☐ No

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8260				Air Bubbles (Y or N)
			249471 / SG-01	1L Tedlar														X	CHS			
6/2/14	1033	Air	249472 / SG-01	1L Tedlar														X	CHS			
	1140		249479 / SG-02															X	CHS			
2.	1147		249480 / SG-02															X				
3.	1241		249473 / SG-03															X				
4.	1249		247803 / SG-03															X				
	1443		249477 / SG-04															X	CHS			
5.	1450		249478 / SG-04															X				
	1414		247809 / SG-05															X	CHS			
6.	1421		249476 / SG-05															X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
6-3-14	0830		ROGER BAIN	6-3-14	0830
Date:	Time:	Relinquished by:	Received by:	Date	Time

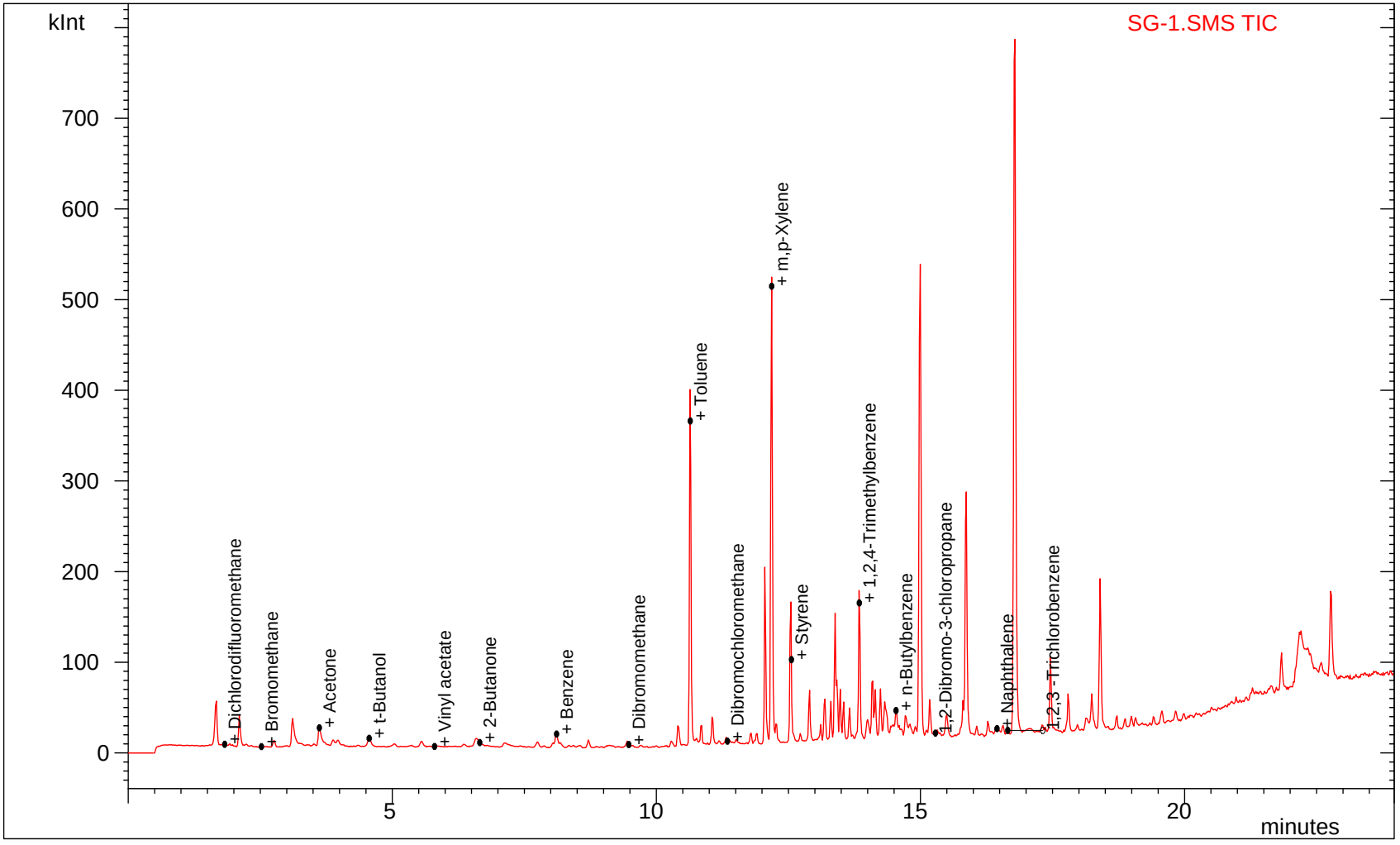
Remarks:
249471 → Do not use!
Only 1 Sample for SG-01 exists!
Run Duplicate of SG-03
TOTAL TO RUN = 6

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\SG-1.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 18:05	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	SG-1	Operator:	RB
Lab Sample ID:	SG-1	Dilution:	1

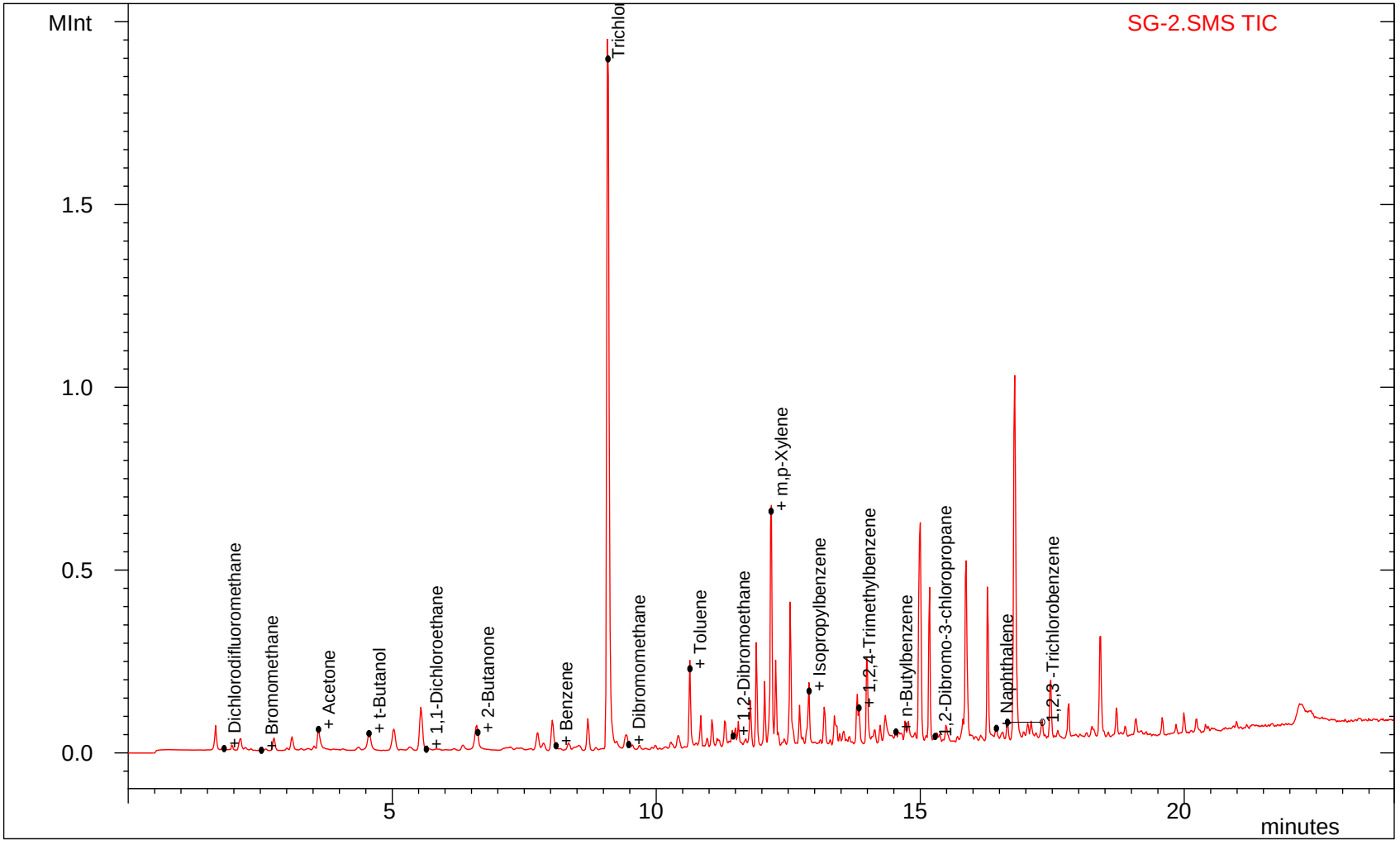


Approved_____ Date_____

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\SG-2.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 18:37	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	SG-2	Operator:	RB
Lab Sample ID:	SG-2	Dilution:	1

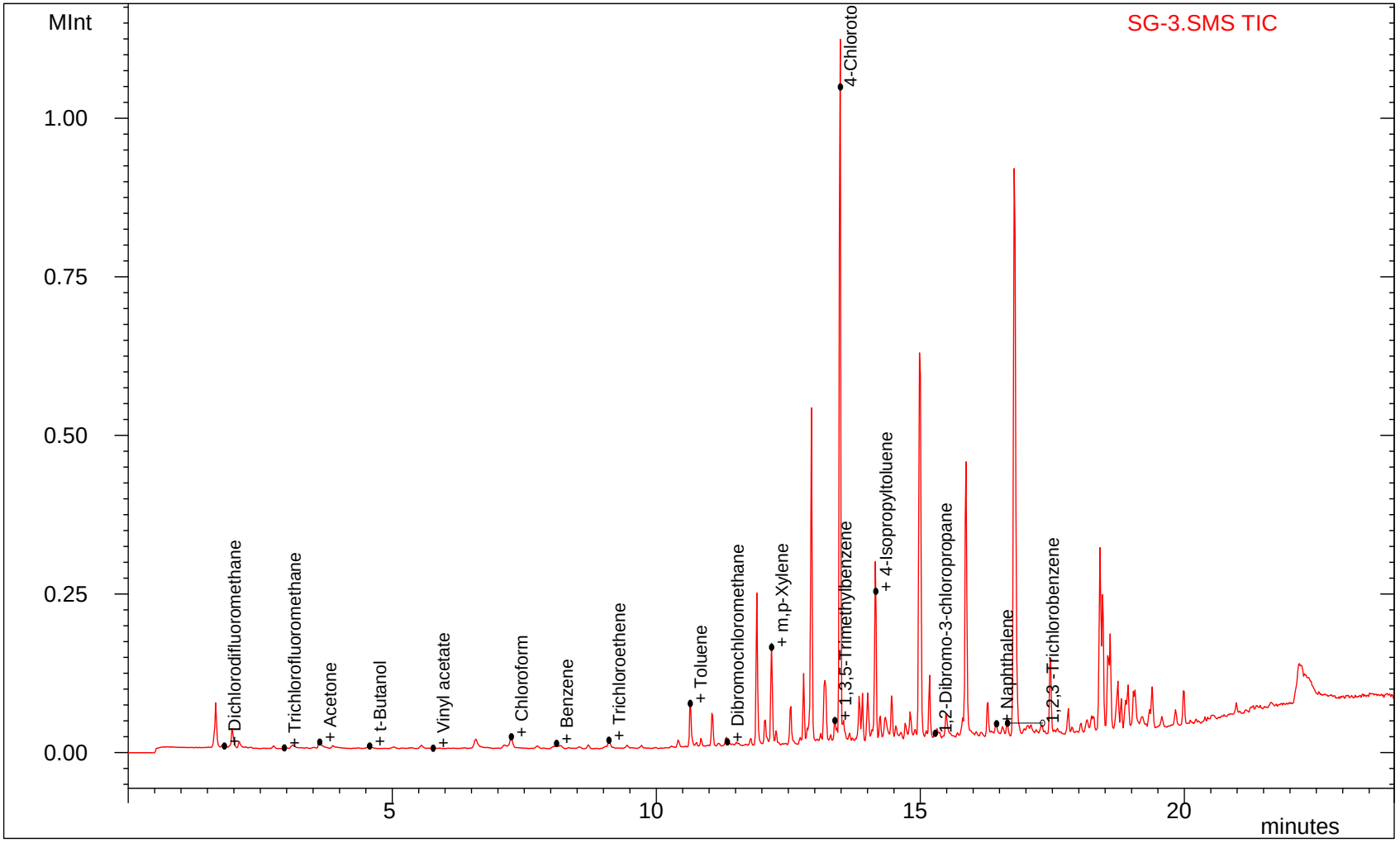


Approved_____ Date_____

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\SG-3.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 19:09	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	SG-3	Operator:	RB
Lab Sample ID:	SG-3	Dilution:	1

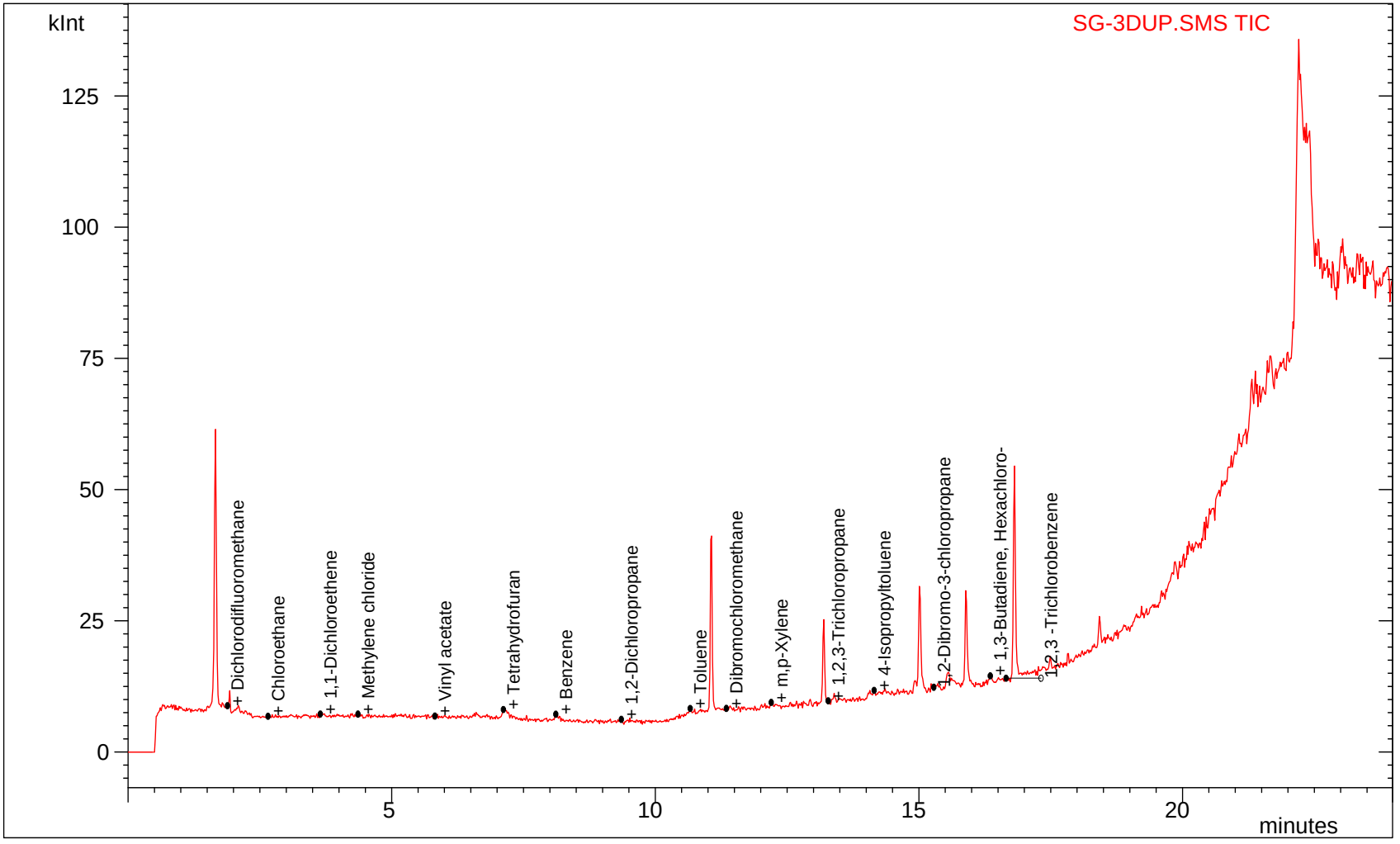


Approved_____ Date_____

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\SG-3DUP.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 20:45	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	SG-3DUP	Operator:	RB
Lab Sample ID:	SG-3DUP	Dilution:	1

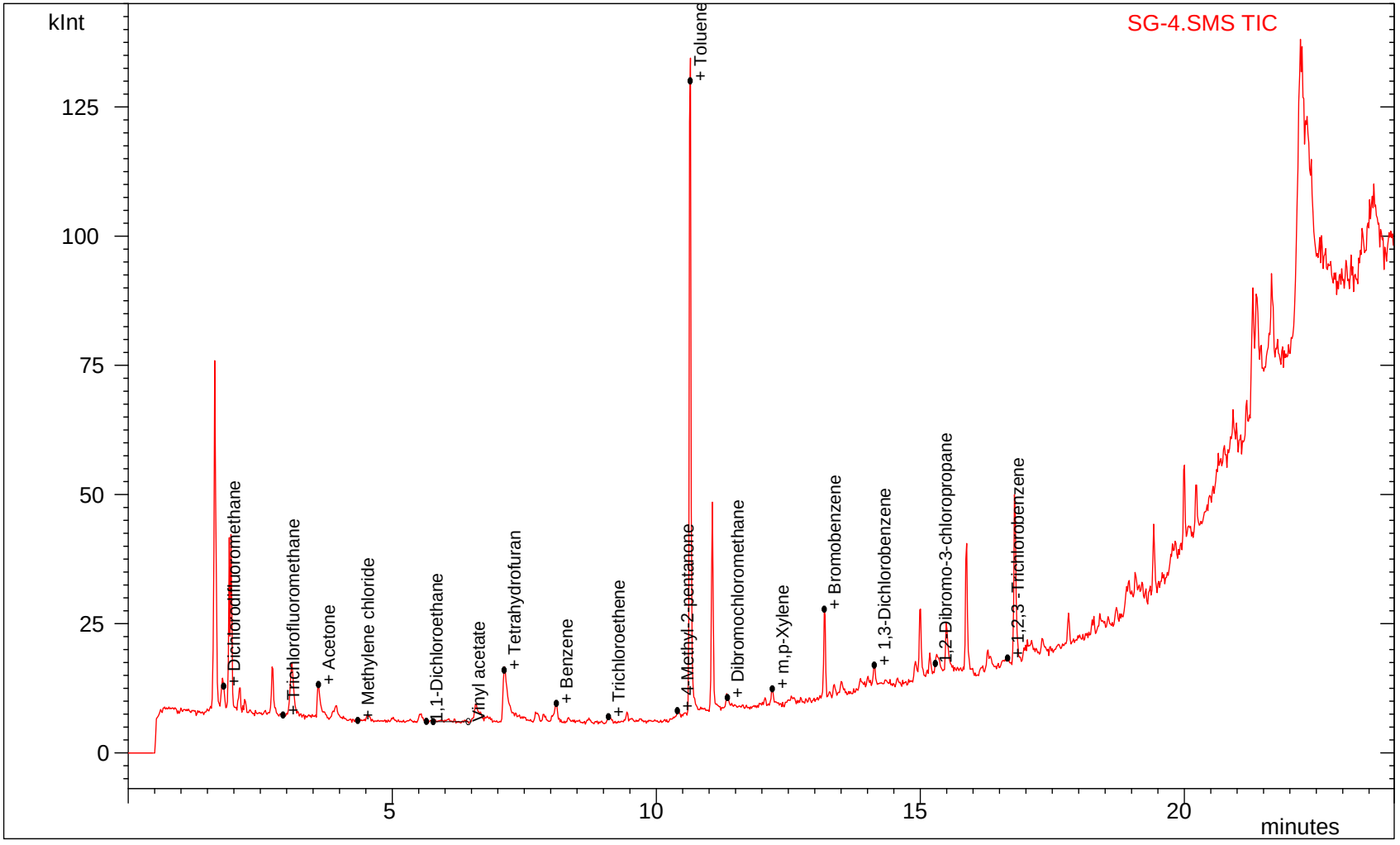


Approved_____ Date_____

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\SG-4.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 19:41	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	SG-4	Operator:	RB
Lab Sample ID:	SG-4	Dilution:	1

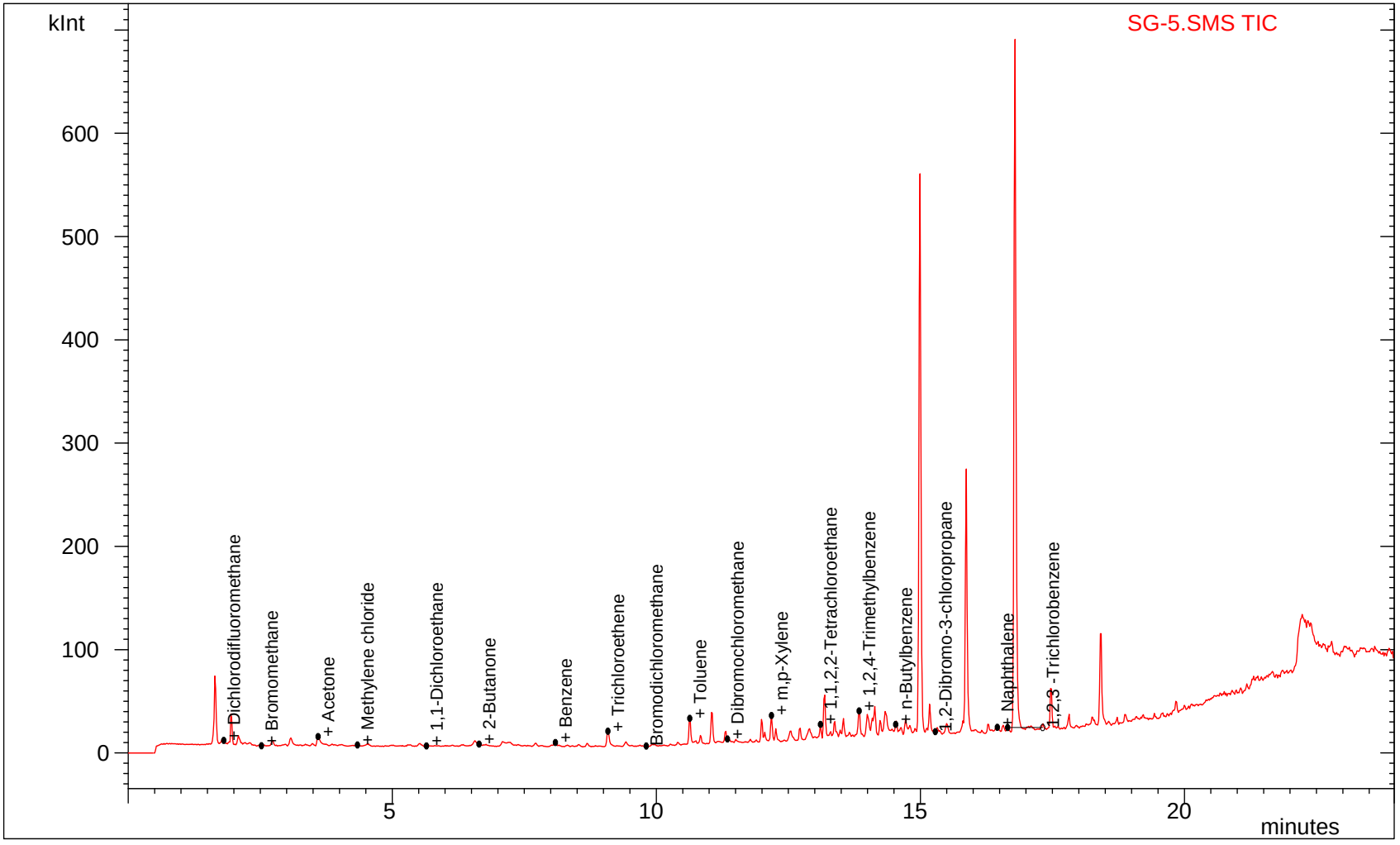


Approved_____ Date_____

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\SG-5.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 20:13	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	SG-5	Operator:	RB
Lab Sample ID:	SG-5	Dilution:	1

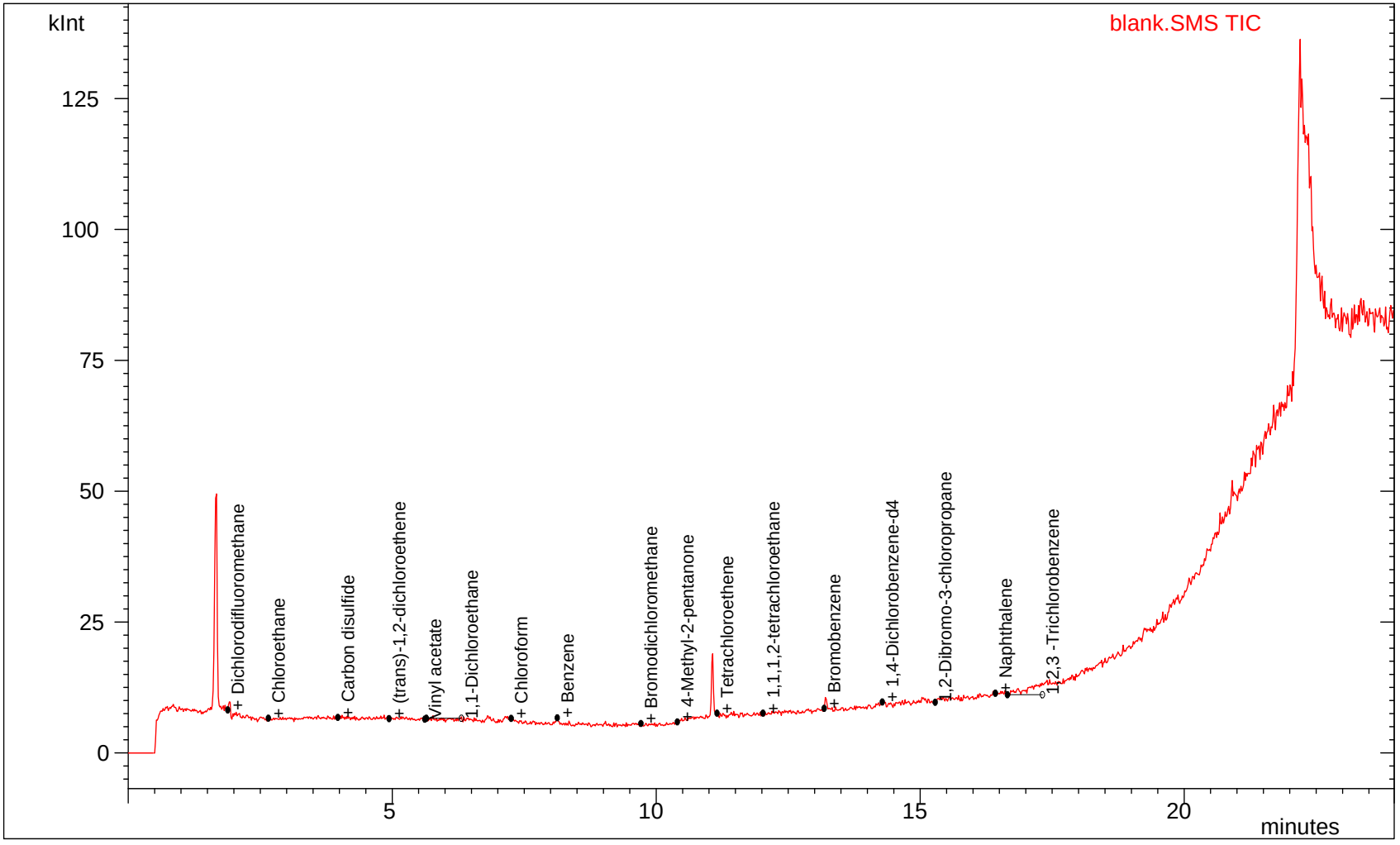


Approved_____ Date_____

CHROMATOGRAM REPORT

EPA Method 8260A

Lab File ID:	c:\varianws\data\14f12\blank.SMS	Calibration File:	C:\VarianWS\Data\11I06\EX-200ng 8260 std.SMS
Acquisition Date:	6/12/2014 17:33	Cal. Sample Date Range:	6/11/2014 16:50 6/11/2014 20:55
EPA Sample No:	blank	Operator:	RB
Lab Sample ID:	blank	Dilution:	1



Approved_____ Date_____

Vista GeoScience

Date: *24-Jun-14*

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MB** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1665**
Client ID: **ZZZZZ** Batch ID: **R1665** TestNo: **SW8260B** Analysis **6/12/2014** SeqNo: **17667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
Freon-113	ND	5.0									
Acetone	ND	5.0									
Iodomethane	ND	5.0									
Carbon disulfide	ND	5.0									
Methylene chloride	ND	5.0									
Acrylonitrile	ND	5.0									
Methyl tert-butyl ether	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
1,1-Dichloroethane	ND	5.0									
Vinyl acetate	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Butanone	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
Bromochloromethane	ND	5.0									
Tetrahydrofuran	ND	5.0									
Chloroform	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1-Dichloropropene	ND	5.0									
Carbon tetrachloride	ND	5.0									
Benzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
Trichloroethene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MB** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1665**
Client ID: **ZZZZZ** Batch ID: **R1665** TestNo: **SW8260B** Analysis **6/12/2014** SeqNo: **17667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	5.0									
Dibromomethane	ND	5.0									
Bromodichloromethane	ND	5.0									
4-Methyl-2-pentanone	ND	5.0									
2-Chloroethyl vinyl ether	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Toluene	ND	5.0									
trans-1,3-Dichloropropene	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
Tetrachloroethene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
Chlorobenzene	ND	5.0									
1,1,1,2-Tetrachloroethane	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	10									
o-Xylene	ND	5.0									
Styrene	ND	5.0									
Bromoform	ND	5.0									
Isopropylbenzene	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
Bromobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
n-Propylbenzene	ND	5.0									
2-Chlorotoluene	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
4-Chlorotoluene	ND	5.0									
tert-Butylbenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MB** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1665**
Client ID: **ZZZZZ** Batch ID: **R1665** TestNo: **SW8260B** Analysis **6/12/2014** SeqNo: **17667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
n-Butylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Naphthalene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									

Sample **MBLK** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1667**
Client ID: **ZZZZZ** Batch ID: **R1667** TestNo: **SW8260B** Analysis **6/13/2014** SeqNo: **17677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	5.0									
Chloromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Bromomethane	ND	5.0									
Chloroethane	ND	5.0									
Trichlorofluoromethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
Freon-113	ND	5.0									
Acetone	ND	5.0									
Iodomethane	ND	5.0									
Carbon disulfide	ND	5.0									
Methylene chloride	ND	5.0									
Acrylonitrile	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MBLK** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1667**
Client ID: **ZZZZZ** Batch ID: **R1667** TestNo: **SW8260B** Analysis **6/13/2014** SeqNo: **17677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
1,1-Dichloroethane	ND	5.0									
Vinyl acetate	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Butanone	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
Bromochloromethane	ND	5.0									
Tetrahydrofuran	ND	5.0									
Chloroform	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1-Dichloropropene	ND	5.0									
Carbon tetrachloride	ND	5.0									
Benzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
Trichloroethene	ND	5.0									
1,2-Dichloropropane	ND	5.0									
Dibromomethane	ND	5.0									
Bromodichloromethane	ND	5.0									
4-Methyl-2-pentanone	ND	5.0									
2-Chloroethyl vinyl ether	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Toluene	ND	5.0									
trans-1,3-Dichloropropene	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
Tetrachloroethene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
2-Hexanone	ND	5.0									
Dibromochloromethane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
Chlorobenzene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Intera
Work Order: 1406001
Project: 14166.01: Bell Trading Post

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_SG

Sample **MBLK** SampTyp **MBLK** TestCode: **8260_SG** Units: **ng/L** Prep Date: RunNo: **1667**
Client ID: **ZZZZZ** Batch ID: **R1667** TestNo: **SW8260B** Analysis **6/13/2014** SeqNo: **17677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	10									
o-Xylene	ND	5.0									
Styrene	ND	5.0									
Bromoform	ND	5.0									
Isopropylbenzene	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
Bromobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
n-Propylbenzene	ND	5.0									
2-Chlorotoluene	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
4-Chlorotoluene	ND	5.0									
tert-Butylbenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
sec-Butylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
n-Butylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Naphthalene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *24-Jun-14*

CLIENT:	Intera	**Client Sample ID:**	SG-02DUP
Lab Order:	1406001	**Tag Number:**	
Project:	14166.01: Bell Trading Post	**Collection Date:**	
Lab ID:	1406001-007A **Date Received:** 6/3/2014	**Matrix:**	SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
Dichlorodifluoromethane	ND	5.0		ng/L	1	6/13/2014
Chloromethane	ND	5.0		ng/L	1	6/13/2014
Vinyl chloride	ND	5.0		ng/L	1	6/13/2014
Bromomethane	ND	5.0		ng/L	1	6/13/2014
Chloroethane	ND	5.0		ng/L	1	6/13/2014
Trichlorofluoromethane	4.1	5.0	J	ng/L	1	6/13/2014
1,1-Dichloroethene	ND	5.0		ng/L	1	6/13/2014
Freon-113	ND	5.0		ng/L	1	6/13/2014
Acetone	320	5.0	E	ng/L	1	6/13/2014
Iodomethane	ND	5.0		ng/L	1	6/13/2014
Carbon disulfide	11	5.0		ng/L	1	6/13/2014
Methylene chloride	1.3	5.0	J	ng/L	1	6/13/2014
Acrylonitrile	ND	5.0		ng/L	1	6/13/2014
Methyl tert-butyl ether	ND	5.0		ng/L	1	6/13/2014
trans-1,2-Dichloroethene	ND	5.0		ng/L	1	6/13/2014
1,1-Dichloroethane	ND	5.0		ng/L	1	6/13/2014
Vinyl acetate	ND	5.0		ng/L	1	6/13/2014
2,2-Dichloropropane	ND	5.0		ng/L	1	6/13/2014
2-Butanone	46	5.0		ng/L	1	6/13/2014
cis-1,2-Dichloroethene	1.6	5.0	J	ng/L	1	6/13/2014
Bromochloromethane	ND	5.0		ng/L	1	6/13/2014
Tetrahydrofuran	ND	5.0		ng/L	1	6/13/2014
Chloroform	6.8	5.0		ng/L	1	6/13/2014
1,1,1-Trichloroethane	1.3	5.0	J	ng/L	1	6/13/2014
1,1-Dichloropropene	ND	5.0		ng/L	1	6/13/2014
Carbon tetrachloride	ND	5.0		ng/L	1	6/13/2014
Benzene	10	5.0		ng/L	1	6/13/2014
1,2-Dichloroethane	ND	5.0		ng/L	1	6/13/2014
Trichloroethene	1800	5.0	E	ng/L	1	6/13/2014
1,2-Dichloropropane	ND	5.0		ng/L	1	6/13/2014
Dibromomethane	ND	5.0		ng/L	1	6/13/2014
Bromodichloromethane	ND	5.0		ng/L	1	6/13/2014
4-Methyl-2-pentanone	9.6	5.0		ng/L	1	6/13/2014
2-Chloroethyl vinyl ether	ND	5.0		ng/L	1	6/13/2014
cis-1,3-Dichloropropene	ND	5.0		ng/L	1	6/13/2014
Toluene	62	5.0		ng/L	1	6/13/2014
trans-1,3-Dichloropropene	ND	5.0		ng/L	1	6/13/2014
1,1,2-Trichloroethane	ND	5.0		ng/L	1	6/13/2014
Tetrachloroethene	12	5.0		ng/L	1	6/13/2014
1,3-Dichloropropane	ND	5.0		ng/L	1	6/13/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Vista GeoScience

Date: *24-Jun-14*

CLIENT: Intera
Client Sample ID: SG-02DUP
Lab Order: 1406001
Tag Number:
Project: 14166.01: Bell Trading Post
Collection Date:
Lab ID: 1406001-007A **Date Received:** 6/3/2014
Matrix: SOIL GAS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOCS IN SOIL GAS BY ATD/GC/MS		**SW8260B**				Analyst: **RB**
2-Hexanone	7.3	5.0		ng/L	1	6/13/2014
Dibromochloromethane	ND	5.0		ng/L	1	6/13/2014
1,2-Dibromoethane	ND	5.0		ng/L	1	6/13/2014
Chlorobenzene	ND	5.0		ng/L	1	6/13/2014
1,1,1,2-Tetrachloroethane	ND	5.0		ng/L	1	6/13/2014
Ethylbenzene	7.8	5.0		ng/L	1	6/13/2014
m,p-Xylene	5.7	10	J	ng/L	1	6/13/2014
o-Xylene	1.3	5.0	J	ng/L	1	6/13/2014
Styrene	ND	5.0		ng/L	1	6/13/2014
Bromoform	ND	5.0		ng/L	1	6/13/2014
Isopropylbenzene	ND	5.0		ng/L	1	6/13/2014
1,1,2,2-Tetrachloroethane	ND	5.0		ng/L	1	6/13/2014
Bromobenzene	ND	5.0		ng/L	1	6/13/2014
1,2,3-Trichloropropane	ND	5.0		ng/L	1	6/13/2014
n-Propylbenzene	ND	5.0		ng/L	1	6/13/2014
2-Chlorotoluene	ND	5.0		ng/L	1	6/13/2014
1,3,5-Trimethylbenzene	ND	5.0		ng/L	1	6/13/2014
4-Chlorotoluene	ND	5.0		ng/L	1	6/13/2014
tert-Butylbenzene	ND	5.0		ng/L	1	6/13/2014
1,2,4-Trimethylbenzene	ND	5.0		ng/L	1	6/13/2014
sec-Butylbenzene	ND	5.0		ng/L	1	6/13/2014
1,3-Dichlorobenzene	ND	5.0		ng/L	1	6/13/2014
4-Isopropyltoluene	ND	5.0		ng/L	1	6/13/2014
1,4-Dichlorobenzene	ND	5.0		ng/L	1	6/13/2014
1,2-Dichlorobenzene	ND	5.0		ng/L	1	6/13/2014
n-Butylbenzene	ND	5.0		ng/L	1	6/13/2014
1,2-Dibromo-3-chloropropane	ND	5.0		ng/L	1	6/13/2014
1,2,4-Trichlorobenzene	ND	5.0		ng/L	1	6/13/2014
Hexachlorobutadiene	ND	5.0		ng/L	1	6/13/2014
Naphthalene	ND	5.0		ng/L	1	6/13/2014
1,2,3-Trichlorobenzene	ND	5.0		ng/L	1	6/13/2014

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 10, 2014

Joseph Tracy

Intera, Inc.
6000 Uptown Boulevard, NE Suite 220
Albuquerque, NM 87110
TEL: (505) 246-1600
FAX (505) 246-2600

RE: Bell Trading Post OrderNo.: 1406074

Dear Joseph Tracy:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/2/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

June 09, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L702253-01

Date Received : June 03, 2014
Description :

Site ID :

Sample ID : 1406074-001A AIR-O-01

Project # :

Collected By :
Collection Date : 06/02/14 07:58

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics - TO-15 SIM									
Benzene	71-43-2	78.1	0.020	0.064	0.12	0.38	TO-15	06/08/14	1
Carbon tetrachloride	56-23-5	154	0.020	0.13	0.080	0.50	TO-15	06/08/14	1
Chloroethane	75-00-3	64.5	0.040	0.11	< 0.040	< 0.11	TO-15	06/08/14	1
Chloroform	67-66-3	119	0.020	0.097	< 0.020	< 0.097	TO-15	06/08/14	1
Chloromethane	74-87-3	50.5	0.030	0.062	0.41	0.85	TO-15	06/08/14	1
1,2-Dibromoethane	106-93-4	188	0.020	0.15	< 0.020	< 0.15	TO-15	06/08/14	1
1,4-Dichlorobenzene	106-46-7	147	0.020	0.12	< 0.020	< 0.12	TO-15	06/08/14	1
1,1-Dichloroethane	75-34-3	98	0.020	0.080	< 0.020	< 0.080	TO-15	06/08/14	1
1,1-Dichloroethene	75-35-4	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
1,2-Dichloropropane	78-87-5	113	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
cis-1,3-Dichloropropene	10061-01-5	111	0.020	0.091	< 0.020	< 0.091	TO-15	06/08/14	1
trans-1,3-Dichloropropene	10061-02-6	111	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
Ethylbenzene	100-41-4	106	0.030	0.13	0.072	0.31	TO-15	06/08/14	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.020	0.14	< 0.020	< 0.14	TO-15	06/08/14	1
Tetrachloroethylene	127-18-4	166	0.020	0.14	0.045	0.31	TO-15	06/08/14	1
1,1,1-Trichloroethane	71-55-6	133	0.020	0.11	< 0.020	< 0.11	TO-15	06/08/14	1
1,1,2-Trichloroethane	79-00-5	133	0.030	0.16	< 0.030	< 0.16	TO-15	06/08/14	1
Trichloroethylene	79-01-6	131	0.020	0.11	0.020	0.11	TO-15	06/08/14	1
Vinyl chloride	75-01-4	62.5	0.020	0.051	< 0.020	< 0.051	TO-15	06/08/14	1
Vinyl acetate	108-05-4	86.1	0.020	0.070	< 0.020	< 0.070	TO-15	06/08/14	1
1,4-Bromofluorobenzene	460-00-4				118	% Rec.	TO-15	06/08/14	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.

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Reported: 06/09/14 10:31 Printed: 06/09/14 10:32

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REPORT OF ANALYSIS

June 09, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : June 03, 2014
Description :

Sample ID : 1406074-002A AIR-I-01

Collected By :
Collection Date : 06/02/14 08:19

ESC Sample # : L702253-02

Site ID :

Project # :

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics - TO-15 SIM									
Benzene	71-43-2	78.1	0.020	0.064	0.20	0.64	TO-15	06/08/14	1
Carbon tetrachloride	56-23-5	154	0.020	0.13	0.079	0.50	TO-15	06/08/14	1
Chloroethane	75-00-3	64.5	0.040	0.11	< 0.040	< 0.11	TO-15	06/08/14	1
Chloroform	67-66-3	119	0.020	0.097	0.12	0.58	TO-15	06/08/14	1
Chloromethane	74-87-3	50.5	0.030	0.062	0.44	0.91	TO-15	06/08/14	1
1,2-Dibromoethane	106-93-4	188	0.020	0.15	< 0.020	< 0.15	TO-15	06/08/14	1
1,4-Dichlorobenzene	106-46-7	147	0.020	0.12	0.020	0.12	TO-15	06/08/14	1
1,1-Dichloroethane	75-34-3	98	0.020	0.080	< 0.020	< 0.080	TO-15	06/08/14	1
1,1-Dichloroethene	75-35-4	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
1,2-Dichloropropane	78-87-5	113	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
cis-1,3-Dichloropropene	10061-01-5	111	0.020	0.091	< 0.020	< 0.091	TO-15	06/08/14	1
trans-1,3-Dichloropropene	10061-02-6	111	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
Ethylbenzene	100-41-4	106	0.030	0.13	0.22	0.95	TO-15	06/08/14	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.020	0.14	< 0.020	< 0.14	TO-15	06/08/14	1
Tetrachloroethylene	127-18-4	166	0.020	0.14	0.028	0.19	TO-15	06/08/14	1
1,1,1-Trichloroethane	71-55-6	133	0.020	0.11	< 0.020	< 0.11	TO-15	06/08/14	1
1,1,2-Trichloroethane	79-00-5	133	0.030	0.16	< 0.030	< 0.16	TO-15	06/08/14	1
Trichloroethylene	79-01-6	131	0.020	0.11	0.040	0.21	TO-15	06/08/14	1
Vinyl chloride	75-01-4	62.5	0.020	0.051	< 0.020	< 0.051	TO-15	06/08/14	1
Vinyl acetate	108-05-4	86.1	0.020	0.070	< 0.020	< 0.070	TO-15	06/08/14	1
1,4-Bromofluorobenzene	460-00-4				117	% Rec.	TO-15	06/08/14	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

June 09, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L702253-03

Date Received : June 03, 2014
Description :

Site ID :

Sample ID : 1406074-003A AIR-I-02

Project # :

Collected By :
Collection Date : 06/02/14 08:22

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics - TO-15 SIM									
Benzene	71-43-2	78.1	0.020	0.064	0.22	0.70	TO-15	06/08/14	1
Carbon tetrachloride	56-23-5	154	0.020	0.13	0.074	0.47	TO-15	06/08/14	1
Chloroethane	75-00-3	64.5	0.040	0.11	0.077	0.20	TO-15	06/08/14	1
Chloroform	67-66-3	119	0.020	0.097	0.12	0.58	TO-15	06/08/14	1
Chloromethane	74-87-3	50.5	0.030	0.062	0.53	1.1	TO-15	06/08/14	1
1,2-Dibromoethane	106-93-4	188	0.020	0.15	< 0.020	< 0.15	TO-15	06/08/14	1
1,4-Dichlorobenzene	106-46-7	147	0.020	0.12	< 0.020	< 0.12	TO-15	06/08/14	1
1,1-Dichloroethane	75-34-3	98	0.020	0.080	< 0.020	< 0.080	TO-15	06/08/14	1
1,1-Dichloroethene	75-35-4	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
1,2-Dichloropropane	78-87-5	113	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
cis-1,3-Dichloropropene	10061-01-5	111	0.020	0.091	< 0.020	< 0.091	TO-15	06/08/14	1
trans-1,3-Dichloropropene	10061-02-6	111	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
Ethylbenzene	100-41-4	106	0.030	0.13	0.30	1.3	TO-15	06/08/14	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.020	0.14	< 0.020	< 0.14	TO-15	06/08/14	1
Tetrachloroethylene	127-18-4	166	0.020	0.14	0.027	0.18	TO-15	06/08/14	1
1,1,1-Trichloroethane	71-55-6	133	0.020	0.11	< 0.020	< 0.11	TO-15	06/08/14	1
1,1,2-Trichloroethane	79-00-5	133	0.030	0.16	< 0.030	< 0.16	TO-15	06/08/14	1
Trichloroethylene	79-01-6	131	0.020	0.11	0.12	0.64	TO-15	06/08/14	1
Vinyl chloride	75-01-4	62.5	0.020	0.051	< 0.020	< 0.051	TO-15	06/08/14	1
Vinyl acetate	108-05-4	86.1	0.020	0.070	< 0.020	< 0.070	TO-15	06/08/14	1
1,4-Bromofluorobenzene	460-00-4				124	% Rec.	TO-15	06/08/14	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.

Reported: 06/09/14 10:31 Printed: 06/09/14 10:32

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REPORT OF ANALYSIS

June 09, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L702253-04

Date Received : June 03, 2014
Description :

Site ID :

Sample ID : 1406074-004A AIR-C-01

Project # :

Collected By :
Collection Date : 06/02/14 08:55

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics - TO-15 SIM									
Benzene	71-43-2	78.1	0.020	0.064	0.39	1.2	TO-15	06/08/14	1
Carbon tetrachloride	56-23-5	154	0.020	0.13	0.082	0.52	TO-15	06/08/14	1
Chloroethane	75-00-3	64.5	0.040	0.11	< 0.040	< 0.11	TO-15	06/08/14	1
Chloroform	67-66-3	119	0.020	0.097	0.30	1.5	TO-15	06/08/14	1
Chloromethane	74-87-3	50.5	0.030	0.062	0.51	1.1	TO-15	06/08/14	1
1,2-Dibromoethane	106-93-4	188	0.020	0.15	< 0.020	< 0.15	TO-15	06/08/14	1
1,4-Dichlorobenzene	106-46-7	147	0.020	0.12	< 0.020	< 0.12	TO-15	06/08/14	1
1,1-Dichloroethane	75-34-3	98	0.020	0.080	< 0.020	< 0.080	TO-15	06/08/14	1
1,1-Dichloroethene	75-35-4	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
1,2-Dichloropropane	78-87-5	113	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
cis-1,3-Dichloropropene	10061-01-5	111	0.020	0.091	< 0.020	< 0.091	TO-15	06/08/14	1
trans-1,3-Dichloropropene	10061-02-6	111	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
Ethylbenzene	100-41-4	106	0.030	0.13	1.4	6.1	TO-15	06/08/14	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.020	0.14	< 0.020	< 0.14	TO-15	06/08/14	1
Tetrachloroethylene	127-18-4	166	0.080	0.54	2.7	18.	TO-15	06/09/14	4
1,1,1-Trichloroethane	71-55-6	133	0.020	0.11	< 0.020	< 0.11	TO-15	06/08/14	1
1,1,2-Trichloroethane	79-00-5	133	0.030	0.16	< 0.030	< 0.16	TO-15	06/08/14	1
Trichloroethylene	79-01-6	131	0.020	0.11	0.58	3.1	TO-15	06/08/14	1
Vinyl chloride	75-01-4	62.5	0.020	0.051	< 0.020	< 0.051	TO-15	06/08/14	1
Vinyl acetate	108-05-4	86.1	0.020	0.070	0.066	0.23	TO-15	06/08/14	1
1,4-Bromofluorobenzene	460-00-4				119	% Rec.	TO-15	06/08/14	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.

Reported: 06/09/14 10:31 Printed: 06/09/14 10:32

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REPORT OF ANALYSIS

June 09, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L702253-05

Date Received : June 03, 2014
Description :

Site ID :

Sample ID : 1406074-005A AIR-C-02

Project # :

Collected By :
Collection Date : 06/02/14 09:00

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics - TO-15 SIM									
Benzene	71-43-2	78.1	0.020	0.064	0.18	0.57	TO-15	06/08/14	1
Carbon tetrachloride	56-23-5	154	0.020	0.13	0.086	0.54	TO-15	06/08/14	1
Chloroethane	75-00-3	64.5	0.040	0.11	< 0.040	< 0.11	TO-15	06/08/14	1
Chloroform	67-66-3	119	0.020	0.097	0.35	1.7	TO-15	06/08/14	1
Chloromethane	74-87-3	50.5	0.030	0.062	0.44	0.91	TO-15	06/08/14	1
1,2-Dibromoethane	106-93-4	188	0.020	0.15	< 0.020	< 0.15	TO-15	06/08/14	1
1,4-Dichlorobenzene	106-46-7	147	0.020	0.12	< 0.020	< 0.12	TO-15	06/08/14	1
1,1-Dichloroethane	75-34-3	98	0.020	0.080	< 0.020	< 0.080	TO-15	06/08/14	1
1,1-Dichloroethene	75-35-4	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.020	0.079	< 0.020	< 0.079	TO-15	06/08/14	1
1,2-Dichloropropane	78-87-5	113	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
cis-1,3-Dichloropropene	10061-01-5	111	0.020	0.091	< 0.020	< 0.091	TO-15	06/08/14	1
trans-1,3-Dichloropropene	10061-02-6	111	0.030	0.14	< 0.030	< 0.14	TO-15	06/08/14	1
Ethylbenzene	100-41-4	106	0.030	0.13	0.43	1.9	TO-15	06/08/14	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.020	0.14	< 0.020	< 0.14	TO-15	06/08/14	1
Tetrachloroethylene	127-18-4	166	0.020	0.14	0.060	0.41	TO-15	06/08/14	1
1,1,1-Trichloroethane	71-55-6	133	0.020	0.11	< 0.020	< 0.11	TO-15	06/08/14	1
1,1,2-Trichloroethane	79-00-5	133	0.030	0.16	< 0.030	< 0.16	TO-15	06/08/14	1
Trichloroethylene	79-01-6	131	0.020	0.11	0.46	2.5	TO-15	06/08/14	1
Vinyl chloride	75-01-4	62.5	0.020	0.051	< 0.020	< 0.051	TO-15	06/08/14	1
Vinyl acetate	108-05-4	86.1	0.020	0.070	< 0.020	< 0.070	TO-15	06/08/14	1
1,4-Bromofluorobenzene	460-00-4				123	% Rec.	TO-15	06/08/14	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.

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Reported: 06/09/14 10:31 Printed: 06/09/14 10:32

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YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Hall Environmental Analysis Laboratory

4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L702253

June 09, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1-Trichloroethane	< .02	ppb			WG725325	06/08/14 17:02
1,1,2,2-Tetrachloroethane	< .02	ppb			WG725325	06/08/14 17:02
1,1,2-Trichloroethane	< .03	ppb			WG725325	06/08/14 17:02
1,1-Dichloroethane	< .02	ppb			WG725325	06/08/14 17:02
1,1-Dichloroethene	< .02	ppb			WG725325	06/08/14 17:02
1,2-Dibromoethane	< .02	ppb			WG725325	06/08/14 17:02
1,2-Dichloropropane	< .03	ppb			WG725325	06/08/14 17:02
1,4-Dichlorobenzene	< .02	ppb			WG725325	06/08/14 17:02
Benzene	< .02	ppb			WG725325	06/08/14 17:02
Carbon tetrachloride	< .02	ppb			WG725325	06/08/14 17:02
Chloroethane	< .04	ppb			WG725325	06/08/14 17:02
Chloroform	< .02	ppb			WG725325	06/08/14 17:02
Chloromethane	< .03	ppb			WG725325	06/08/14 17:02
cis-1,2-Dichloroethene	< .02	ppb			WG725325	06/08/14 17:02
cis-1,3-Dichloropropene	< .02	ppb			WG725325	06/08/14 17:02
Ethylbenzene	< .03	ppb			WG725325	06/08/14 17:02
Tetrachloroethylene	< .02	ppb			WG725325	06/08/14 17:02
trans-1,2-Dichloroethene	< .02	ppb			WG725325	06/08/14 17:02
trans-1,3-Dichloropropene	< .03	ppb			WG725325	06/08/14 17:02
Trichloroethylene	< .02	ppb			WG725325	06/08/14 17:02
Vinyl acetate	< .02	ppb			WG725325	06/08/14 17:02
Vinyl chloride	< .02	ppb			WG725325	06/08/14 17:02
1,4-Bromofluorobenzene		% Rec.	101.0	60-140	WG725325	06/08/14 17:02

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1,1-Trichloroethane	ppb	.5	0.457	91.4	70-130	WG725325
1,1,2,2-Tetrachloroethane	ppb	.5	0.458	91.6	70-130	WG725325
1,1,2-Trichloroethane	ppb	.5	0.481	96.3	70-130	WG725325
1,1-Dichloroethane	ppb	.5	0.419	83.8	70-130	WG725325
1,1-Dichloroethene	ppb	.5	0.382	76.5	70-130	WG725325
1,2-Dibromoethane	ppb	.5	0.506	101.	70-130	WG725325
1,2-Dichloropropane	ppb	.5	0.397	79.4	70-130	WG725325
1,4-Dichlorobenzene	ppb	.5	0.546	109.	70-130	WG725325
Benzene	ppb	.5	0.406	81.2	70-130	WG725325
Carbon tetrachloride	ppb	.5	0.437	87.5	70-130	WG725325
Chloroethane	ppb	.5	0.374	74.8	70-130	WG725325
Chloroform	ppb	.5	0.452	90.4	70-130	WG725325
Chloromethane	ppb	.5	0.354	70.7	70-130	WG725325
cis-1,2-Dichloroethene	ppb	.5	0.404	80.8	70-130	WG725325
cis-1,3-Dichloropropene	ppb	.5	0.430	86.1	70-130	WG725325
Ethylbenzene	ppb	.5	0.499	99.8	70-130	WG725325
Tetrachloroethylene	ppb	.5	0.500	100.	70-130	WG725325
trans-1,2-Dichloroethene	ppb	.5	0.400	80.0	70-130	WG725325
trans-1,3-Dichloropropene	ppb	.5	0.459	91.8	70-130	WG725325
Trichloroethylene	ppb	.5	0.428	85.6	70-130	WG725325
Vinyl acetate	ppb	.5	0.439	87.9	70-130	WG725325
Vinyl chloride	ppb	.5	0.358	71.5	70-130	WG725325
1,4-Bromofluorobenzene				107.0	60-140	WG725325

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1-Trichloroethane	ppb	0.478	0.457	96.0	70-130	4.49	25	WG725325
1,1,2,2-Tetrachloroethane	ppb	0.421	0.458	84.0	70-130	8.36	25	WG725325
1,1,2-Trichloroethane	ppb	0.463	0.481	92.0	70-130	3.90	25	WG725325
1,1-Dichloroethane	ppb	0.421	0.419	84.0	70-130	0.580	25	WG725325
1,1-Dichloroethene	ppb	0.420	0.382	84.0	70-130	9.26	25	WG725325

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

Hall Environmental Analysis Laboratory

4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L702253

June 09, 2014

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	Duplicate RPD	Limit	Batch
1,2-Dibromoethane	ppb	0.467	0.506	93.0	70-130	8.01	25	WG725325
1,2-Dichloropropane	ppb	0.399	0.397	80.0	70-130	0.520	25	WG725325
1,4-Dichlorobenzene	ppb	0.448	0.546	90.0	70-130	19.7	25	WG725325
Benzene	ppb	0.406	0.406	81.0	70-130	0.0400	25	WG725325
Carbon tetrachloride	ppb	0.480	0.437	96.0	70-130	9.31	25	WG725325
Chloroethane	ppb	0.401	0.374	80.0	70-130	6.98	25	WG725325
Chloroform	ppb	0.482	0.452	96.0	70-130	6.39	25	WG725325
Chloromethane	ppb	0.384	0.354	77.0	70-130	8.36	25	WG725325
cis-1,2-Dichloroethene	ppb	0.411	0.404	82.0	70-130	1.71	25	WG725325
cis-1,3-Dichloropropene	ppb	0.417	0.430	83.0	70-130	3.04	25	WG725325
Ethylbenzene	ppb	0.455	0.499	91.0	70-130	9.32	25	WG725325
Tetrachloroethylene	ppb	0.495	0.500	99.0	70-130	1.10	25	WG725325
trans-1,2-Dichloroethene	ppb	0.420	0.400	84.0	70-130	4.88	25	WG725325
trans-1,3-Dichloropropene	ppb	0.423	0.459	85.0	70-130	8.04	25	WG725325
Trichloroethylene	ppb	0.429	0.428	86.0	70-130	0.260	25	WG725325
Vinyl acetate	ppb	0.500	0.439	100.	70-130	12.9	25	WG725325
Vinyl chloride	ppb	0.390	0.358	78.0	70-130	8.54	25	WG725325
1,4-Bromofluorobenzene				107.0	60-140			WG725325

Batch number /Run number / Sample number cross reference

WG725325: R2936966: L702253-01 02 03 04 05

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: INT | Work Order Number: 1406074 | RcptNo: 1

Received by/date: MG 06/02/14

Logged By: Michelle Garcia 6/2/2014 5:31:00 PM Michelle Garcia

Completed By: Michelle Garcia 6/2/2014 5:37:01 PM Michelle Garcia

Reviewed By: MG 06/02/14

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Chain-of-Custody Record

Client: INTERA

Mailing Address: on file

Phone #: ✓

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☒ EDD (Type) XL

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Bell Trading Post

Project #:

Project Manager: Joe Tracy

Sampler: C. Short

On Ice: ☐ Yes ☐ No

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1406074	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/2/14	0758	Air	Air-O-01	6L Summa	—	-001												+ + + + TO-15 - Simms				
	0819		Air-I-01		—	-002																
	0822		Air-I-02		—	-003																
	0855		Air-C-01		—	-004																
↓	0900	↓	Air-C-02		—	-005																

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
6/2	1710 CHS			6/2/14	1710	
Date:	Time:	Relinquished by:	Received by:	Date	Time	
				06/02/14	1733	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.